

Course V Cost Approach to Value

Grant M. Hilton

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GREAB Continuing Education Credit

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Course I

- Course IA
- Course II
- Course IVA
- Course IVB
- Course V
- Course VI
- •GAA

20 Hrs:

Exempt Properties
Specialized Assessments
Deed Research
APM Digest Review
Appeals Procedure
Advanced Income

Recert for Assessors
Review of Income

14 hours GREAB credit for these classes beginning March 1^{st,} 2017.





No GREAB Continuing Education Credit will be given for the following:

WinGap Classes
Course III
Basic Accounting
Verification of Personal Property
Manufactured Housing





GREAB Continuing Education Credit

•Please have your GREAB Appraiser/Sales Person# available on the last day of class to enter on the class credit form.





GREAB Continuing Education Credit

•40 Hrs:	<u>20 Hrs:</u>			
•Course I	Exempt Properties			
•Course IA	Specialized Assessments			
•Course II	Deed Research			
•Course IVA	APM Digest Review			
•Course IVB	Appeals Procedure			
•Course V	Advanced Income			
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OVERVIEW OF COURSE V

- Mass Appraisal Process (Ch. 1)
- Estimating Reproduction or Replacement Cost New (Ch. 2)
- Fundamentals Slides of Various Houses
- Estimating Accrued Depreciation (Ch. 3)
- Site Valuation, Analysis and Adjustments (Ch. 4)
- Methods of Land Valuation (Ch. 5)
- Land Formulas, Tables, Rules And Valuing Odd Shaped Lots (Ch. 6)





TEST CRITERIA

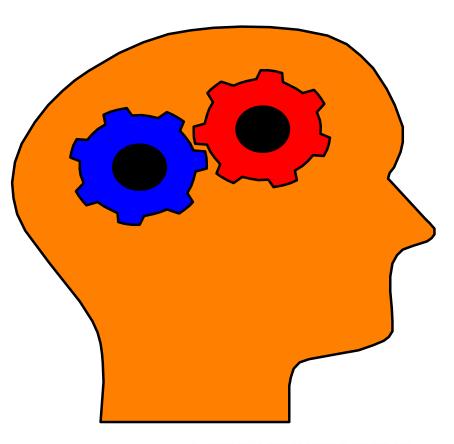
•CASE STUDIES 35%

- Houses/Commercials
 - 14 Points
- Street 10.50 Points
- Quality Grading House Slides – 10.50 Points

•FINAL EXAM 65%

Exam - 65 Points







TWO WAYS TO DO THINGS!

- THE RIGHT WAY!
- The Easy, Most Uniform Way!
- THE WRONG WAY!
- That is just the way we have always done it!





Chapter 1 - Real Estate Appraisal Terminology. What is an Appraisal?

- An Estimate or Opinion of Value
- Types of Appraisals (Pg. 10)
 - Fee Usually for Estates, Financing, Condemnation
 - * Subject to review but not appeal.
 - 2. Mass Always For Ad Valorem Tax Purposes
 - * Subject to appeal.





SENATE BILL 346

Definitions in 48-5-2

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• (.1) Arm's length, bona fide sale' means a transaction which has occurred in good faith without fraud or deceit carried out by unrelated or unaffiliated parties, as by a willing buyer and a willing seller, each acting in his or her own self-interest, including but not limited to a distress sale, short sale, bank sale, or sale at public auction.

Property characteristics and condition considerations still apply in selection of comparables



Definition of FMV HB196

- Amends 48-5-2 (3)
- Title 48, Chapter 5, Section 2 (48-5-2)
- "(3) 'Fair market value of property' means the amount a knowledgeable buyer would pay for the property and a willing seller would accept for the property at an arm's length, bona fide sale. The income approach, if data are available, shall be considered in determining the fair market value of income-producing property. If actual income and expense data are voluntarily supplied by the property owner, such data shall be considered in such determination.





SENATE BILL 346

- Amends 48-5-2 (3)
- Notwithstanding any other provision of this chapter to the contrary, the transaction amount of the most recent arm's length, bona fide sale in any year shall be the maximum allowable fair market value for the next taxable year.





Sales Qualification Procedures

• 560-11-10-.02(1)(n). Most Recent Arm's Length Sale. As referenced in OCGA 48-5-2(3), transactions must occur prior to the statutory date of valuation to become eligible for the value limitations imposed in 48-5-2(3). Furthermore, where the exchange of property is defined as an arm's length transaction, the sum of the value of the exchanged real estate property components, land and improvements, in the year following the property exchange shall not exceed the transaction's sale price adjusted for non-real estate values such as but not limited to, timber, personal property, etc.





560-11-10.02 (continued)

The adjustment to the value of the real estate shall remain in effect for at least the digest year following the transaction. With respect to changes in the exchanged real estate property components since the time of exchange (sale date), the value of new improvements, value of additions to existing improvements (footprint of exchanged structure has been altered), major remodeling or renovations to existing structures (footprint of exchanged structure has not been altered), and adjustments to land due to consolidation of tracts, new surveys, zoning changes, land use changes, etc. shall be added to the sales price adjusted values.





Renovations and Remodeling

 In the event an exchanged real estate property structure is renovated or remodeled, the term major shall be construed such that both the property owner and BOA would reasonably conclude a major renovation/remodeling has occurred. If either party, acting reasonably, could debate that the renovation/remodeling effort was not major in nature, the renovation/remodeling effort does not qualify and shall not be added to the sales price adjusted values. Any modifications made to the exchanged real estate property after the sale date that result in a lower value of the exchanged property shall be considered in the final valuation of property for the digest.



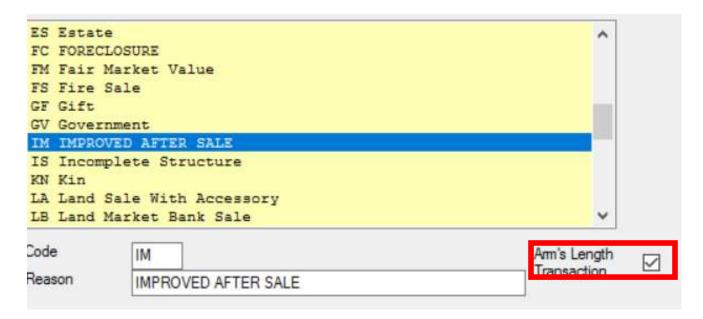


SALES QUALIFICATION REASONS Sales involving government agencies and public utilities;

- 1.
- 2. Sales involving charitable, religious, or educational institutions
- Sales in which a financial institution is the buyer and affiliated party. 3.
- Sales between relatives or corporate affiliates or any affiliated party;
- 5. Sales between adjacent property owners; (If sale is above or below MKT)
- 6. Sales of convenience:
- 7. Sales settling an estate:
- 8. Sales of doubtful title:
- Sales involving trades;
- 10. Sales conveying partial interest or land contracts;
- Sales conveying additional interests of property other than the real property;
- 12. Sales involving incomplete or unbuilt community property;
- Sales involving multi-county property;
- Sales forced by legal difficulties;
- Sales using non-conventional financing;
- Sales in which the consideration is not greater than \$1,000.
- 17. Short Sales ALT
- 18. Sales of Government Resales after Foreclosure ALT
- Sales of Bank Resales after Foreclosure ALT
- Sales of Individual resales of previously foreclosed property -ALT.
- or21 പ്ര Sales of Qualified Improved between unaffiliated parties ALT,
 - Sales of Qualified Vacant between/amaffiliated parties ALT.



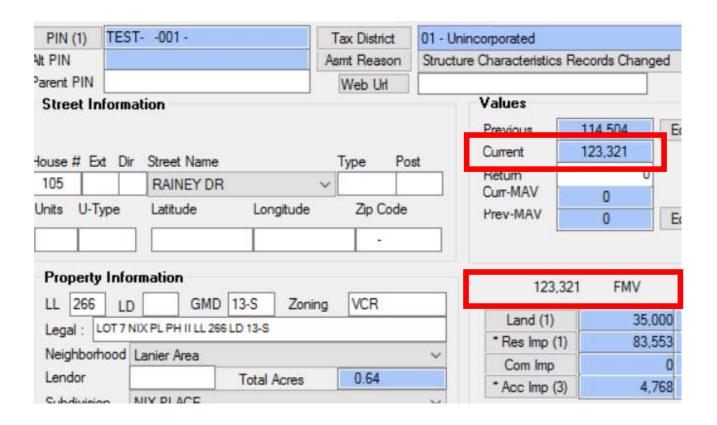
Allocating Sales With IMP Renovation







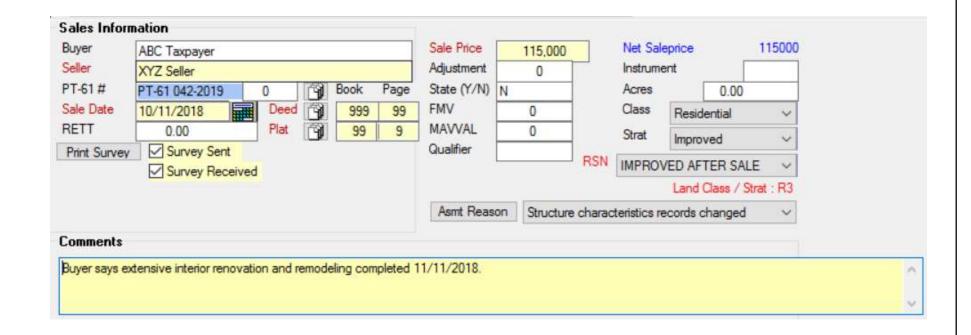
Property Value Prior to Renovation Procedures







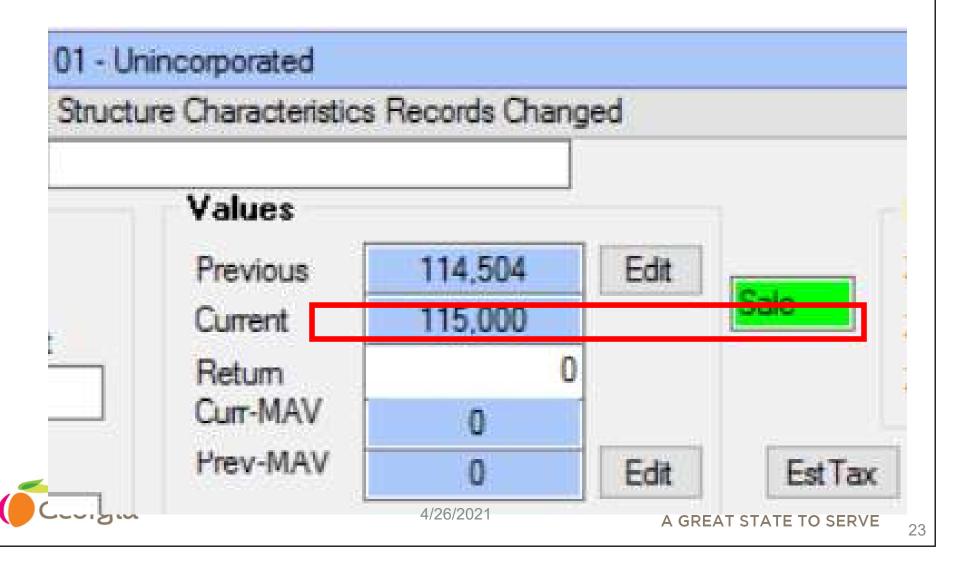
Sales Data Entry Prior to Renovation Procedures





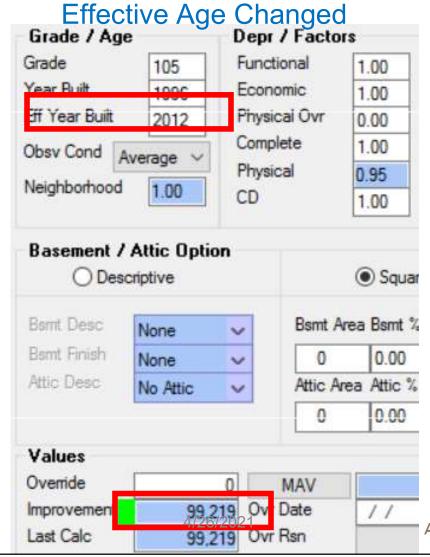


Sale Allocated Prior to Renovation





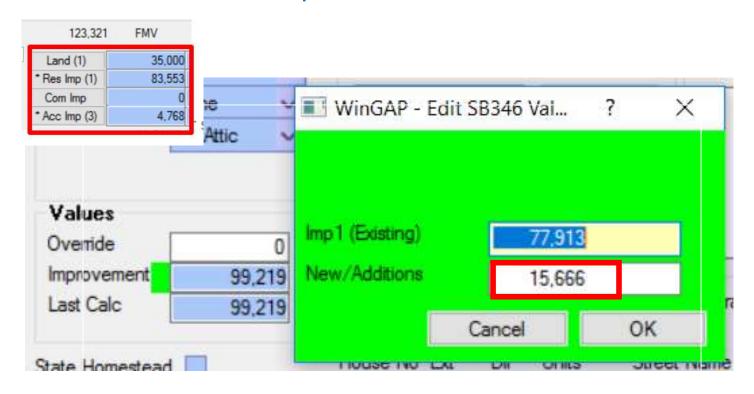
Renovation Data Entry Completed







Right Click On Value Field by Green Box Add Imp Vale Difference

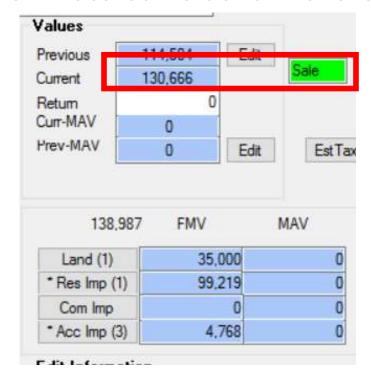






Previous Current 114,504 Edit Sale

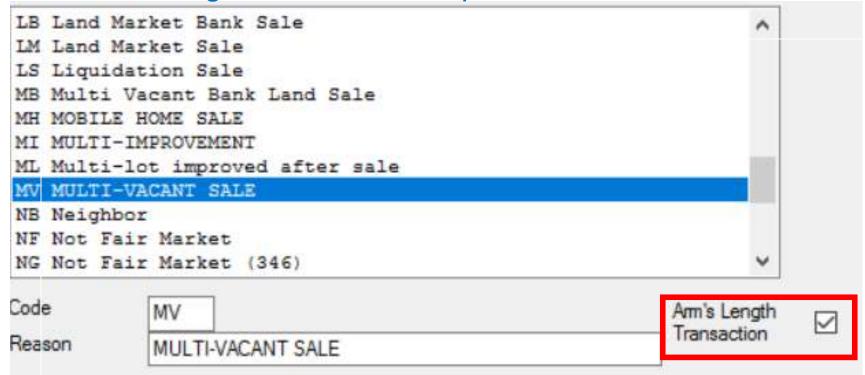
Final Allocated Value for Renovation







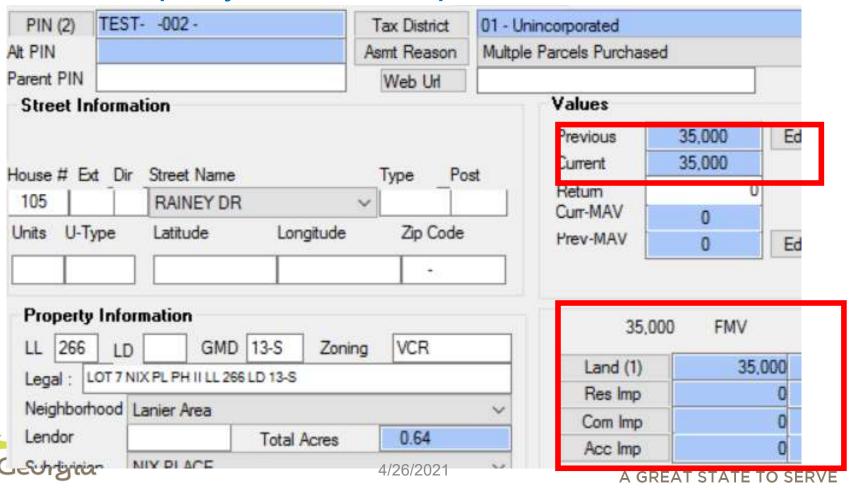
Allocating Sales With Multiple Parcels One Deed





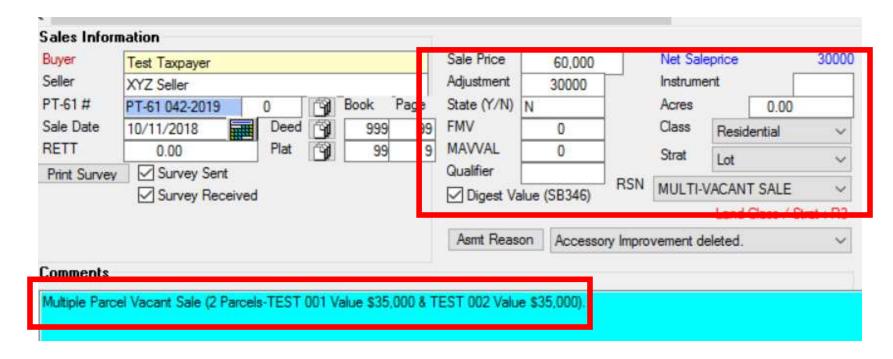


Property Value Multiple Parcel Sale





Final Allocated Value Multiple Parcel Sale

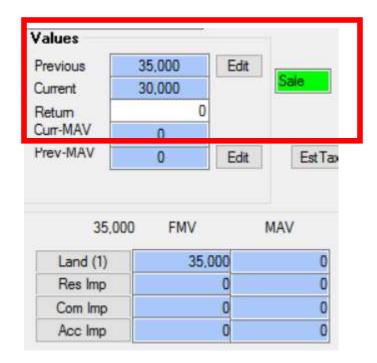


Repeat Steps on additional parcel(s).





Final Allocated Value for Multiple Parcel







Allocating Multiparcel Sales

- Buyer purchased 3 parcels 200 acres, 100 acres, 50 acres on 11/11/2018 for 1,800,000.
 Allocation as follows:
- Total FMV of all 3 parcels 2,100,000
 - FMV Tract 1; 1,200,000 / 2,100,000= .57 allocation.
 - FMV Tract 2; 600,000 / 2,100,000= .29 allocation.
 - FMV Tract 3; 300,000 / 2,100,000= .14 allocation.





Allocating Multiparcel Sales

- 1,800,000 SP Allocation as follows:
- Tract 1 net_sp (1,800,000 x .57= 1,026,000 SB346)
 - Total SP1,800,000-1,026,000=774,00 Adjustment
- Tract 2 net sp $(1,800,000 \times .29 = 522,000 \text{ SB}346)$
 - Total SP 1,800,000-522,000=1,278,000 Adjustment.
- Tract 3 net_sp $(1,800,000 \times .14 = 252,000 SB346)$
 - Total SP 1,800,000-252,000 = 1,548,000 Adjustment.

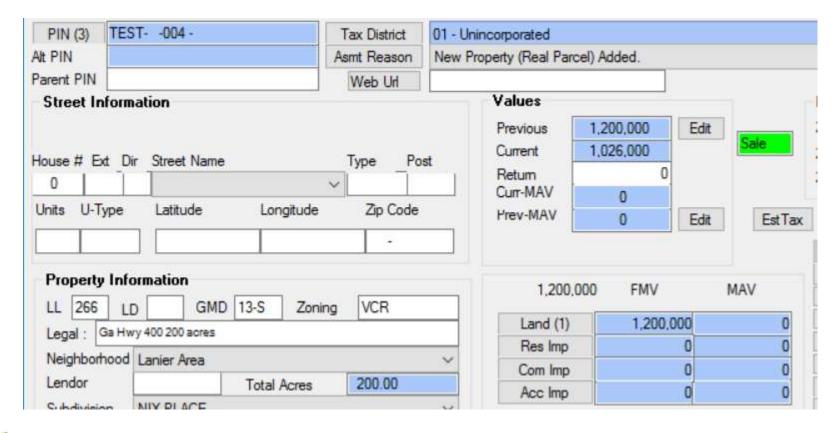






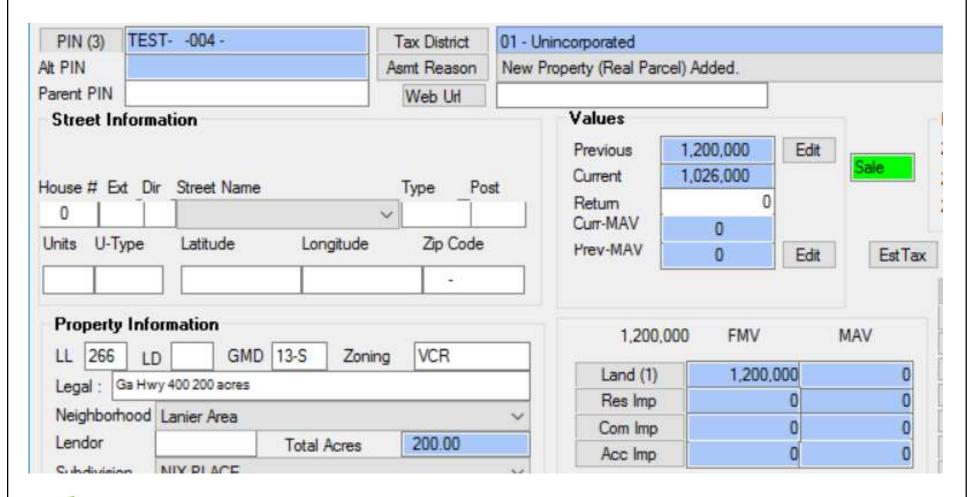








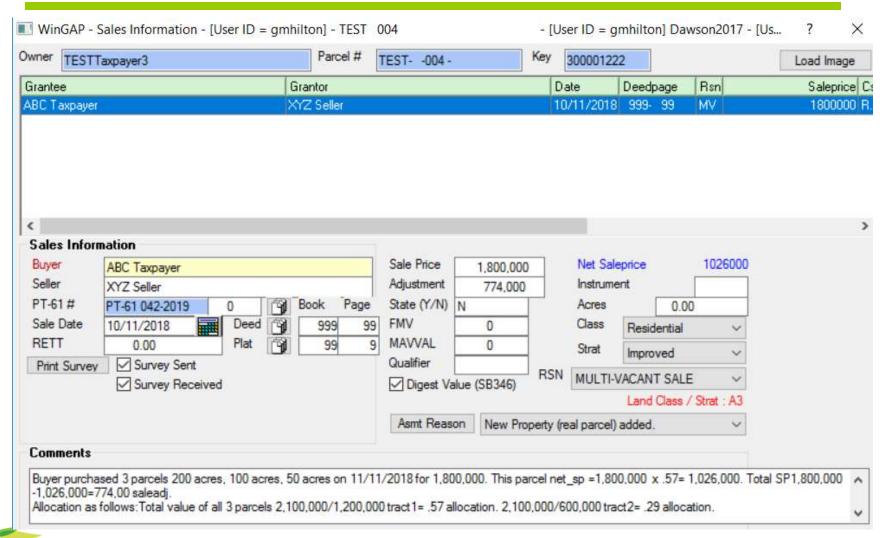




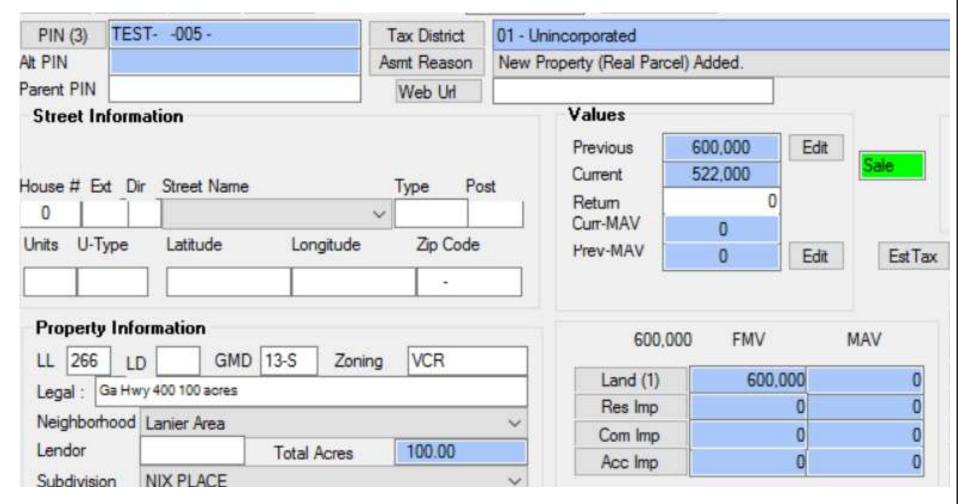




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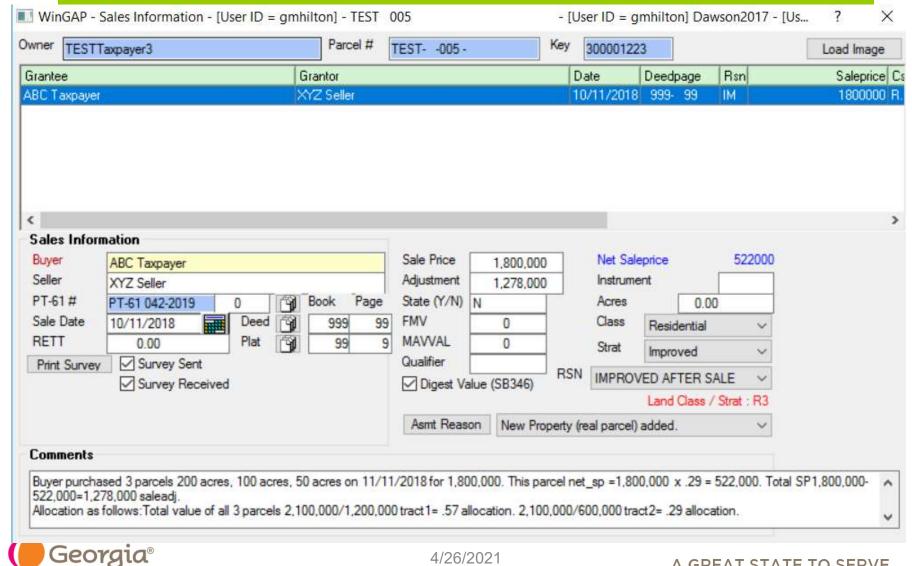




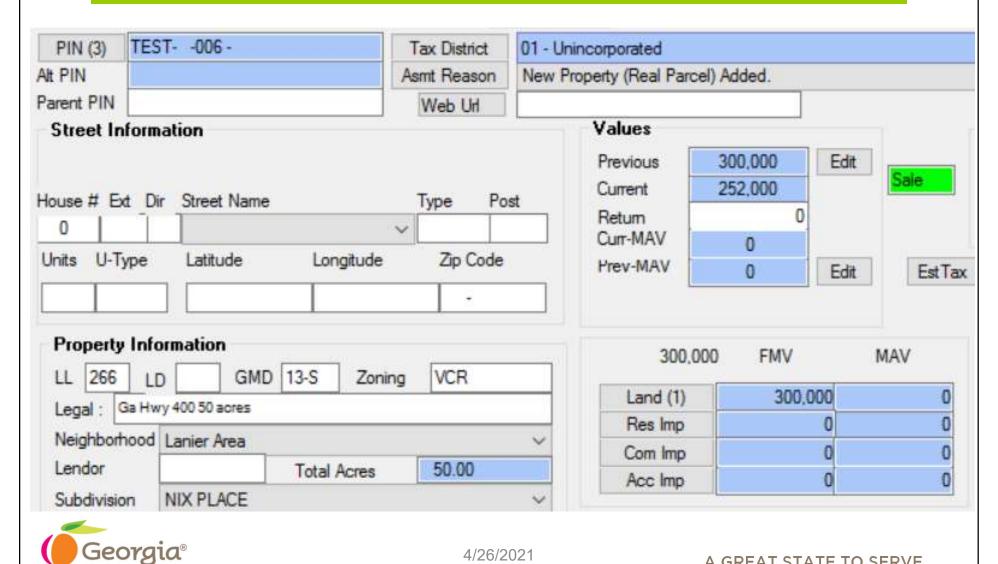




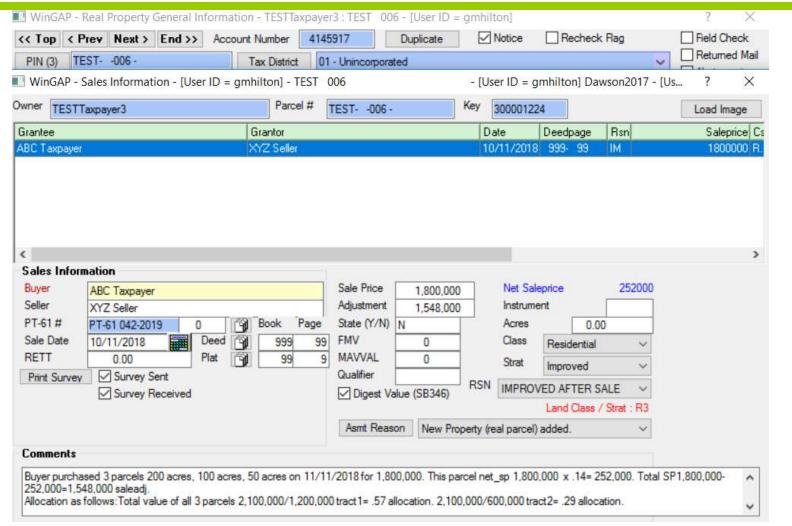
















Criteria BOA Must Apply for FMV

- 48-5-2 (3) (B) The tax assessor shall apply the following criteria in determining the fair market value of real property:
- i. Existing zoning of property;
- ii. Existing use of property, including any restrictions or limitations on the use of property resulting from state or federal law or rules or regulations adopted pursuant to the authority of state or federal law;
- iii. Existing covenants or restrictions in deed dedicating the property to a particular use;
- iv. Bank sales, other financial institution owned sales or distressed sales, or any combination thereof of comparable real property.
 - Most local lending institutions may show consideration on the deed or PT61.
 - ii. Most federal institutions may not show consideration on deed or PT61.





Criteria BOA Must Apply for FMV

- v. Decreased value of the property based on limitations and restrictions resulting from the property being in a conservation easement.
- (vi) Rent limitations, higher operating costs resulting from regulatory requirements imposed on the property, and any other restrictions imposed upon the property in connection with the property being eligible for any income tax credits with respect to real property which are claimed and granted pursuant to either Section 42 of the Internal Revenue Code of 1986, as amended, or Chapter 7 of this title or receiving any other state or federal subsidies provided with respect to the use of the property as residential rental property; provided, however, that properties described in this division shall not be considered comparable real property for the assessment or appeal of assessment of properties not covered by this division;





Criteria BOA Must Apply for FMV

 (vii) (I) In establishing the value of any property subject to rent restrictions under the sales comparison approach, any income tax credits described in division (vi) of this subparagraph that are attributable to a property may be considered in determining the fair market value of the property, provided that the tax assessor uses comparable sales of property which, at the time of the comparable sale, had unused income tax credits that were transferred in an arm's length, bona fide sale.





Criteria BOA Must Apply for FMV

 (II) In establishing the value of any property subject to rent restrictions under the income approach, any income tax credits described in division (vi) of this subparagraph that are attributable to property may be considered in determining the fair market value of the property, provided that such income tax credits generate actual income to the record holder of title to the property; and





Criteria BOA Must Apply for FMV

- (viii) Any other existing factors provided by law or by rule and regulation of the commissioner deemed pertinent in arriving at fair market value.
- (B.1) The tax assessor shall not consider any income tax credits with respect to real property which are claimed and granted pursuant to either Section 42 of the Internal Revenue Code of 1986, as amended, or Chapter 7 of this title in determining the fair market value of real property.





Criteria BOA Must Apply for FMV

 (B.2) In determining the fair market value of real property, the tax assessor shall not include the value of any intangible assets used by a business, wherever located, including patents, trademarks, trade names, customer agreements, and merchandising agreements.





Foreclosure Defined

- A foreclosure is a complex legal process, not a sale. Black's Law Dictionary (2001) defines foreclosure as:
 - A legal proceeding to terminate a mortgagor's interest in property, instituted by the lender (the mortgagee) either to gain title or to force a sale in order to satisfy the unpaid debt secured by the property.





Foreclosure

- Deed in Lieu of Foreclosure
 - "Soft sale,"
 - Mortgagee and the mortgagor have agreed that "in lieu" of being foreclosed upon the seller executes warranty deed to lender.
 - Total purchase price is the amount of the loan in default, plus associated fees.
 - Lender does not incur the costs and time incurred in the foreclosure process.
 - Sale is not exposed to open market
 - Affiliated party and not arms length.





Distressed Sale

Short Sale

- A pre-foreclosure sale
- Bank or mortgage lender (middle man)
 discounts loan balance due to economic or financial hardship on the part of the mortgagor
- Sale negotiated between 2 parties in which a lender takes less than the total amount due.
- Arm's length transaction as defined by 48-5-2(.1)





Distressed Sale

Government Sale

- Arm's length transaction as defined by 48-5-2
 .1 when documentation is available to validate the consideration and parties are unrelated or unaffiliated.
- In the Court of Appeals of Georgia
- A14A2268. CPF INVESTMENTS, LLLP v. FULTON COUNTY BOARD OF ASSESSORS.





Distressed Sale

- Sale At Public Auction
 - Arm's length transaction as defined by 48-5-2
 .1 when parties are unrelated or unaffiliated.





Bank Sale

- Real Estate Owned (REO or Previously Foreclosed Property)
 - Resale of property formerly owned or previously foreclosed on by a_financial institution (the seller is the financial institution).
 - Arm's length transaction as defined by 48-5-2
 .1 so long as parties are unrelated or unaffiliated.





Tax Sale

- Sale of property by Tax Commissioner
- Non-Arm's length transaction, since title does not transfer for 1 year as defined by 48-5-2 .1





Analyzing Foreclosure Activity in the Market

- XYZ County evidence example
- 1. Modify sales qualification code table to delineate between foreclosures and foreclosure resales.
- 2. Create Spreadsheet of Q Arms Length Transactions only by neighborhood.
- 3. Analyze to see if land or structure tables need to be adjusted.
- 4. Create Spreadsheet of FC sales (FC) only by neighborhood. (Appraisers physically review property)
- 5. Create Spreadsheet FC re-sales (FR) by the lender or individual owner by neighborhood. (Appraisers physically review property)
- 6. Create Master spreadsheet delineating out the number of Q, FC, and FR sales.
- 7. Analyze all sales by neighborhood and determine if FR have effect on market.
- 8. Adjust land and structure tables accordingly.
- 9. Create ratio reports by class, (R,A,C,I, Overall, Neighborhood or Map) to include Arms Length and Foreclosure Re-sales.

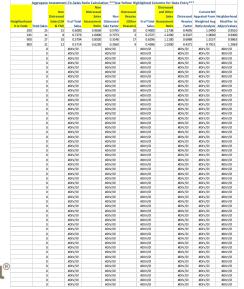




Analyzing Foreclosure Resale Activity in the Market

Aggregate Assessment-To-Sales Ratio Calculation *	***Use Yellow Highlighted Columns for Data Entry***
---	---

-00-0										
			Non				Distressed			
	Non		Distressed		Distressed		and Other		Current NH	
	Distressed		Sales	Non	Resales		Sales	Distressed	Appraisal From	Neighborhood
	Sales (LM	% of Total	Assessment	Distressed	(Other	% of Total	Assessment	Resales	Weighted Avg	Modifier to
Total Sales	& FM)	Sales	Ratio	Sale Factor	Reasons)	Sales	Ratio	Factor	Ratio Analysis	Adjust Values
25	15	0.6000	0.9658	0.5795	10	0.4000	1.1738	0.4695	1.0490	0.9510
11	8	0.7273	1.0000	0.7273	3	0.2727	1.2200	0.3327	1.0600	0.9400
27	10	0.3704	0.8500	0.3148	17	0.6296	1.1100	0.6989	1.0137	0.9863
21	12	0.5714	0.6230	0.3560	9	0.4286	1.0200	0.4371	0.7931	1.2069



- •To decrease a neighborhood; Subtract what ever percentage you are over 1.00 to get a factor adjustment to be applied to the current neighborhood adjustment
- •To increase a neighborhood; Add what ever percentage you need to get to 1.00 plus 1 to get a factor adjustment to be applied to the current neighborhood adjustment



MISCONCEPTION - Appraisal Procedure Manual

- 560-11-10-.09(2)(d)(4.)(iii)
- Field review frequency. (Not Revaluation frequency)
- All real property parcels should be physically reviewed at least once every THREE YEARS to ascertain that property information records are current.





HOUSE BILL 304



- Amends 48-5-264.1:
- The chief appraiser, other members of the county board of tax assessors may go upon property outside of buildings, posted or otherwise in order to carry out the duty of making appraisals of the fair market value of taxable property in the county, other than property directly returned to the commissioner; provided, however, the person representing the board shall carry identification which is sufficiently prominent to permit the occupant to readily ascertain he is such representative and if practicable shall first advise the occupant of his purpose.





HOUSE BILL 304



- Amends 48-5-264.1:
 - Chief appraiser, county appraisal staff, authorized agents of county BTA and members of BTA may go upon property outside buildings.
 - Shall carry identification.
 - Shall advise occupant if practicable.
 - Shall not enter upon property unless reasonable notice has been provided to the owner/occupant.





House Bill 304

- Insert in Water Bill
- Publish on website (change dates and areas periodically)
 - Upload a spreadsheet of parcel numbers and street addresses of the parcels to be reviewed each quarter.
- Publish in newspaper
- Ask Building Permit Office to Add statement to Building Permit
- Add statement to Sales Questionnaires
- Put Sign in Area (i.e. subdivision, road/street, etc.
- Use Government Cable Channel
- Tax Commissioner shall include statement on tax bill and on official website regarding taxpayer's right to file return.





HOUSE BILL 304

- Reasonable Notice
 - Provide notice to taxpayer when:
 - filing return
 - filing appeal
 - Prepare a notice for building permit department to give taxpayer at time building permit is issued
 - Follow DOT guidelines (Very Detailed)





HOUSE BILL 304

 Tax Commissioner shall include statement on tax bill and on official website regarding taxpayer's right to file return.





Review of County Tax Digest By The State Revenue

- Commissioner 560-11-2-.56
 County boards of assessors are required by the State Constitution and state law to continuously maintain assessments of property that are reasonably uniform and that are based on fair market value as defined in O.C.G.A. 48-5-2 (except as otherwise stated in O.C.G.A. 48-5-6- and O.C.G.A. 48-5-7 (c.3)). The Department is required by law to periodically review the county digests to determine if the digests are in compliance with such laws.
- This Regulation imposes no additional requirements on the county boards of tax assessors. It merely sets forth the statistical and other methods that are used by the department in making its determination. The Department does not determine when to revalue property. Each county board of tax assessors determines for itself when it believes a revaluation of property is necessary for legal compliance. Failure to revalue property shall not in and of itself be a basis for assessment of penalty.

Moratorium 2009, 2010, 2011. For 2012 Digest, \$5 per parcel penalty and State mill recovery are back in play. (No longer in



3 APPROACHES TO VALUE

- MARKET Based on the principle of SUBSTITUTION; most important of all evaluation principles.
- Basic Steps :
 - 1.Gathering of recent sales data
 - 2.Comparing sales to subject
 - 3.Verifying sales (Qualification)
 - 4.Adjusting sales (Timber, Time, Personal Prop.)
 - 5.Estimating value





3 APPROACHES TO VALUE

- 1. COST-RCN normally sets the upper limits of value.
 - Value is decreased through 3 forms of DEPRECIATION.
 - a. Physical Deterioration
 - Wear and Tear
 - Inadequate repair or maintenance





b. FUNCTIONAL OBSOLESCENCE

- Design deficiency
 - Inadequacy
 - Superadequacy





- c. ECONOMIC OBSOLESCENCE-Occurs due to forces external to the property
 - Encroaching commercial properties
 - Environmental or pollution (LUST)





3 APPROACHES TO VALUE

1. Market – Most Computer Assisted
Mass Appraisal Systems adjust
internal cost tables by changing
neighborhood factors or point/base
costs to reflect the market when sales
ratio analysis indicates a need.





3 APPROACHES TO VALUE

- 3. INCOME- Capitalizes net income into value.
- 48-5-2 (3) The income approach, if data are available, shall be considered in determining the fair market value of income-producing property. If actual income and expense data are voluntarily supplied by the property owner, such data shall be considered in such determination. Notwithstanding any other provision of this chapter to the contrary, the transaction amount of the most recent arm's length, bona fide sale in any year shall be the maximum allowable fair market value for the next taxable year.

Used for income producing properties

- Single Family Residential Rentals GRM-Gross Rent Multiplier
- Saleprice / Gross Monthly income
- method of measuring accrued depreciation





3 APPROACHES TO VALUE

All other income producing properties:

- Apartment complexes
- Office buildings
- Shopping centers etc.
- GIM-Gross Income Multiplier
 - Saleprice/Gross Yearly income
 - method of measuring accrued depreciation





Shall Consider all three Approaches to Value (Market, Cost, Utilize Income)

SUBJECT

MARKET - 10 SALES = 92,500

COST -- RES 15 YRS OLD = 87,300

INCOME -- 1 RENTAL = 85,000

WHICH APPROACH GIVES BETTER VALUE?





Chapter 2 - Reproduction or Replacement Cost New

- Reproduction Cost The cost of creating an "Exact Replica or identical structure" based on current prices for labor and materials as similar to the original as possible. May be used to measure functional obsolescence.
- Replacement Cost The cost of creating an improvement having the same or equivalent utility as another using modern standards of materials and current prices for labor. Replacement cost new is usually less than Reproduction cost new due to the obsolete design of the reproduction. (Cures Functional Obsolescence)





Types of Costs

- Property Appraisal and Assessment
 Administration, International Association of Assessing Officers, 1990, Chicago,
- Costs consist of all expenditures necessary to complete construction and place in the hands of the buyer.





Direct Costs

- Materials
- Labor
- Supervision
- Equipment rentals
- Utilities





Indirect Costs-off site

- a. Professional services
 - i. Architect's fees
 - ii. Engineer's fees
 - iii.Surveyor's fees
 - iv.Legal fees and expenses
 - v.Appraisal fees

- b. Developer's overhead
- c. Building Permits and Licenses
- d. Insurance Premiums
- e. Interest
- f. Taxes (incurred during construction)
- g. Selling Expenses
- Carrying costs from completion of sale to occupancy,
- Contractor's or subcontractor's overhead and profit (sometimes shown as a % of direct costs.)





Direct Costs and Indirect Costs

- When building cost tables in a CAMA system, the appraiser should be sure all costs are accounted for.
- Sources may include surveying owners of new construction or contractors or developers of benchmark properties.





4 Methods of Cost Estimating

- 1. QUANTITY SURVEY METHOD The most "detailed and most precise method of cost estimating. (Used by contractors not Mass appraisers) Detailed inventory of materials and equipment used to build the improvement
- 2. UNIT-IN-PLACE METHOD Breaks the cost down into components of work done by subcontractors using workable units such as square foot, linear foot or other units.
- 3. SQUARE FOOT/CUBIC FOOT METHOD/POINT COST (Total Gross Living Area) Must be careful to compare houses of similar type of construction. (Better to break it down to its parts, living area, plumbing, garages, porches, heating, etc. (Most CAMA Systems)
- 4. FACTORED HISTORICAL COST METHOD- Applies an index or trend factor to a previous value from an appropriate construction cost index

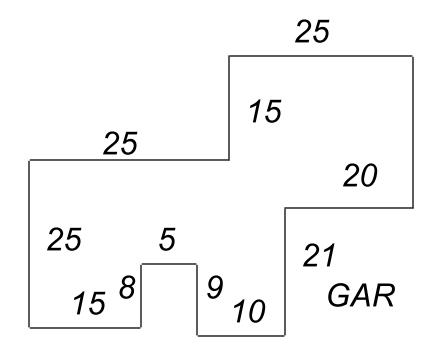




	Label	Descrip	Sqft	Costfact	Areafact	Labeltype	Bldgtype
	Utm	Utility	0.000010	1.0000	1.0000	Appendage	Mobile
	Wdm	Wood Deck	0.000010	1.0000	1.0000	Appendage	Mobile
	1Stm	1.0 Story	0.000000	1.0000	1.0000	Primary	Mobile
	2Stm	2.0 Story	0.000000	1.0000	1.0000	Primary	Mobile
	ADDr	Addition	45.000000	1.0000	1.0000	Addition	Residential
16.00	AUFr	Attic Unfinished	4.110000	1.0000	1.0000	Appendage	Residential
	BUFr	Basement Ufinished	14.000000	1.0000	1.0000	Appendage	Residential
16.00	CARr	Carport	13.000000	1.0000	1.0000	Appendage	Residential
	DKr	Wood Deck	15.500000	1.0000	1.0000	Appendage	Residential
	EPr	Enclosed Porch	53.110000	1.0000	1.0000	Appendage	Residential
100 0.3	GARr	Garage	24.910000	1.0000	1.0000	Appendage	Residential
	0Pr	Open Porch	24.630000	1.0000	1.0000	Appendage	Residential
10000	PATr	Patio	4.920000	1.0000	1.0000	Appendage	Residential
- CO (C.)	UTRr	Utility Room	35.000000	1.0000	1.0000	Appendage	Residential
50 0.7	BFNr	Basement Finished	33.580000	1.0000	1.0000	Interior	Residential
160	1.0C	1.0 Story Cathedral	0.000000	1.2500	1.0000	Primary	Residential
	1.5s	1.5 Story	0.000000	1.6000	1.5000	Primary	Residential
	1STr	1 Story	0.000000	1.0000	1.0000	Primary	Residential
	2.0L	2.0 Story w/Loft	0.000000	1.4000	1.0000	Primary	Residential
	2.5s	2.5 Story	0.000000	2.3000	2.5000	Primary	Residential
10000	2STr	2 Story	0.000000	1.9000	2.0000	Primary	Residential
	3STr	3 Story	0.000000	2.5000	3.0000	Primary	Residential
	2nd	Upper Floor Area	0.000000	1.0000	1.0000	Upper	Residential
	AFNr	Attic Finished	17.150000	1.0000	1.0000	Upper	Residential
	LFT	Loft Upper Floor	0.000000	0.4500	1.0000	Upper	Residential 81



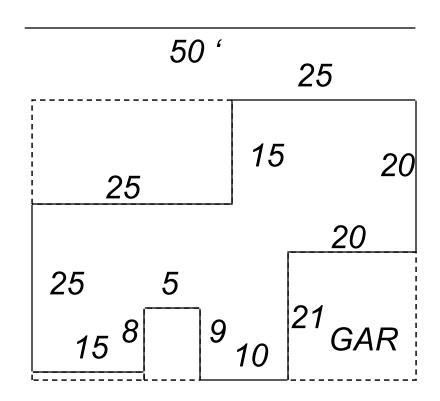
Calculating Sq. Feet of House







Calculating Sq. Feet of House

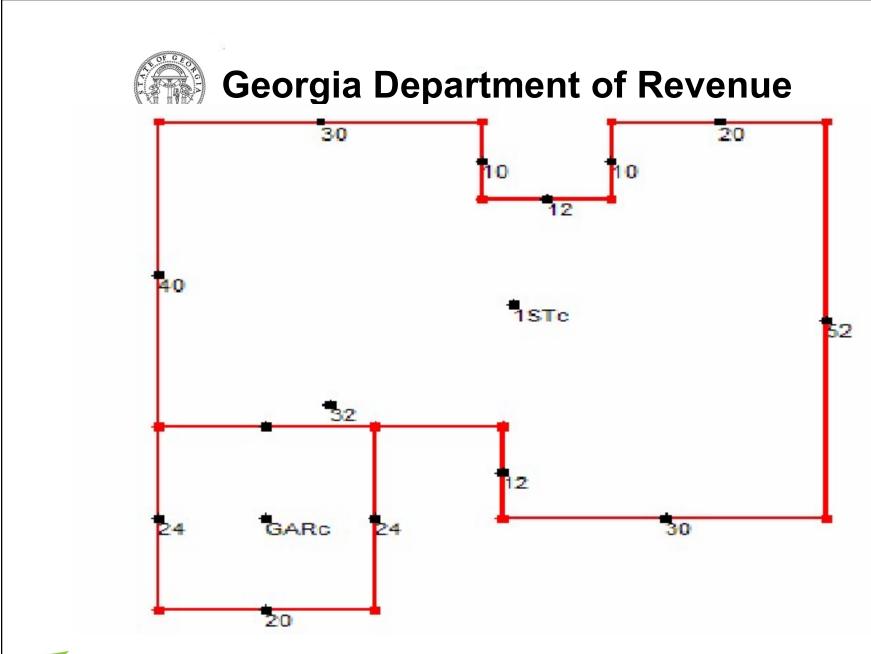


$$50 \times 41 = 2050$$

 $20 \times 21 = -420$
 $15 \times 25 = -375$
 $9 \times 5 = -45$
 $41 \cdot 1 \times 15 = -15$

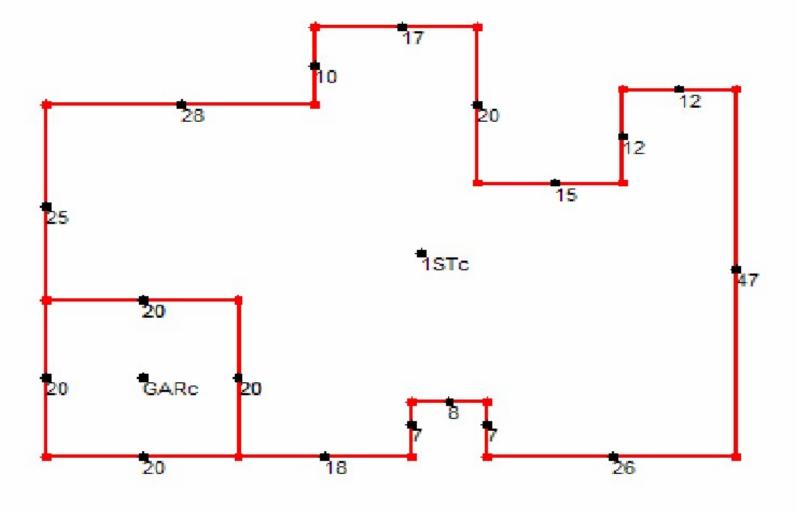
1195 HA 420 GAR



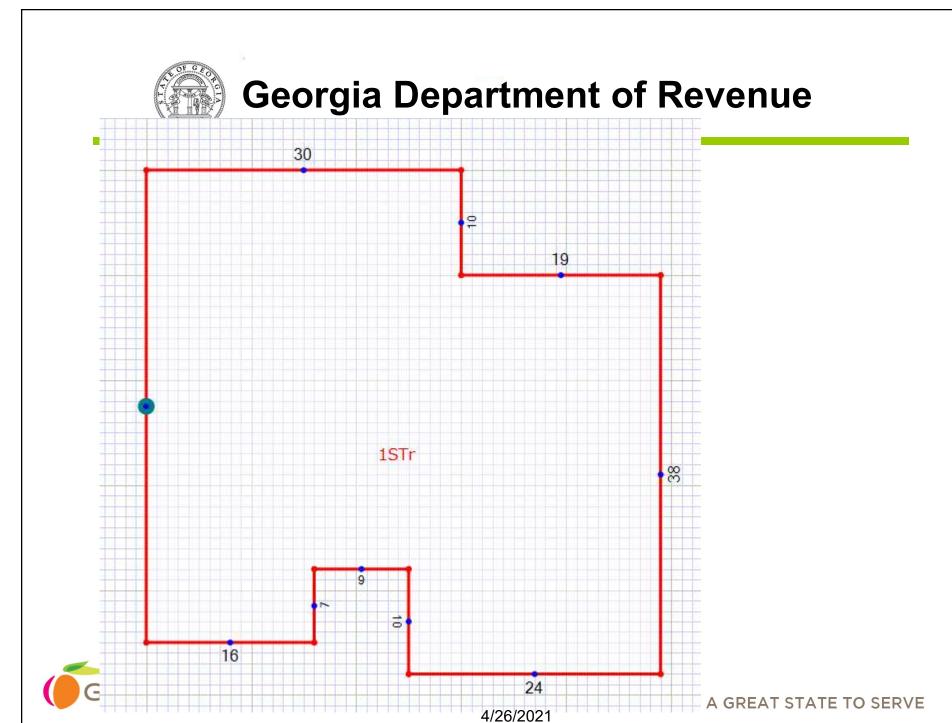


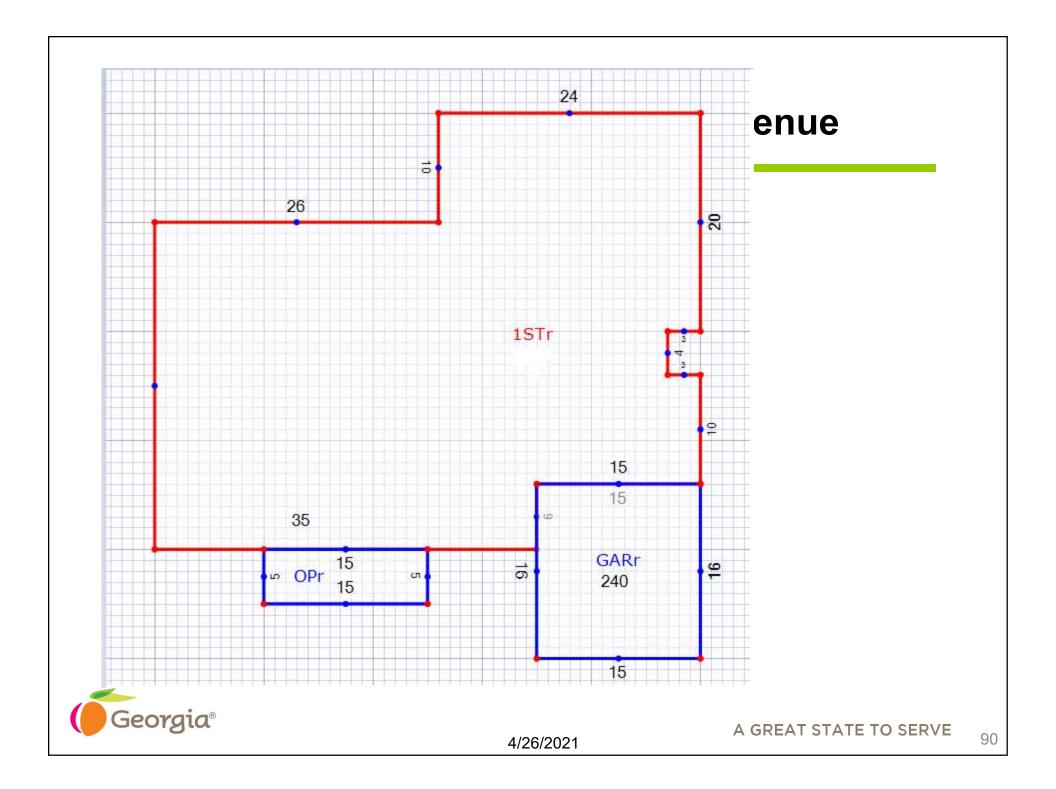


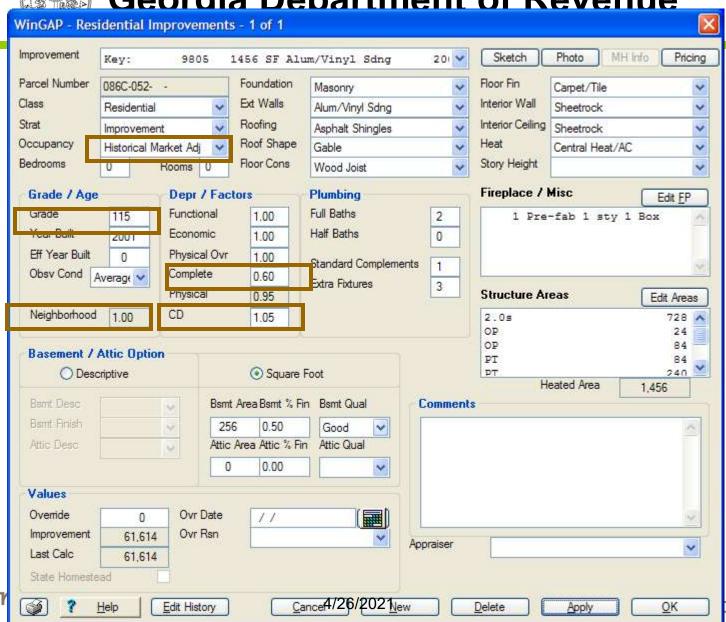




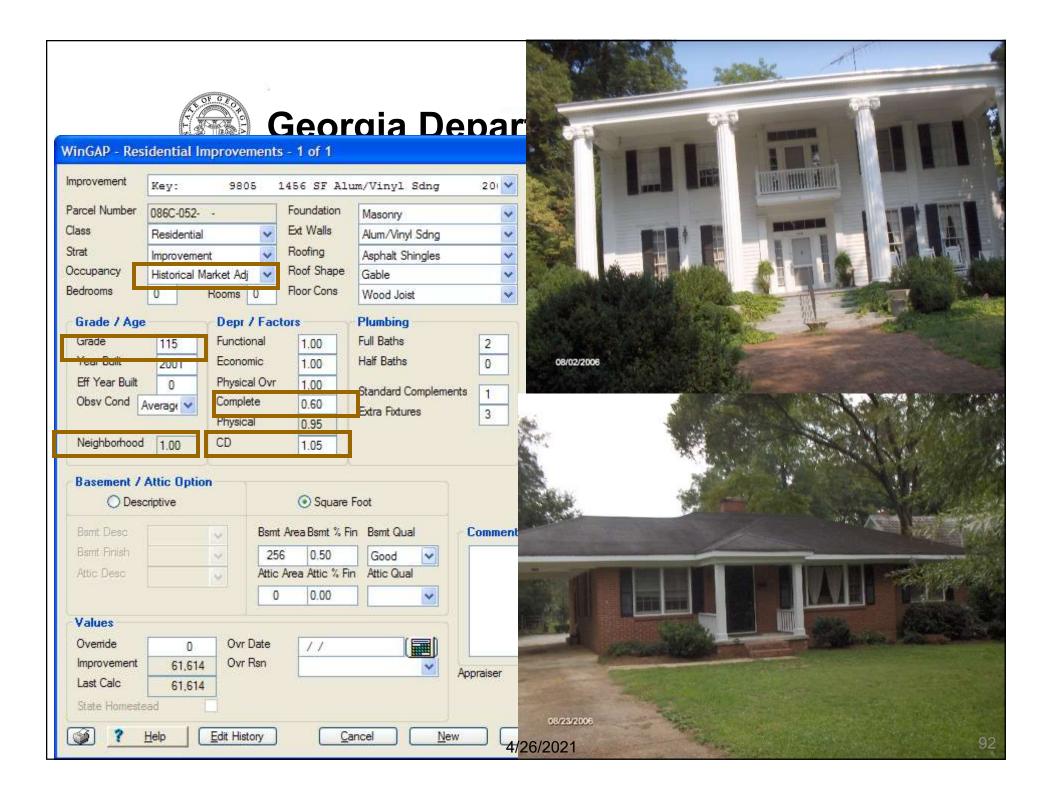














Fundamentals

 By
 Grant M. Hilton
 Grading Quality of Construction and Other Important Guidelines





RCN Case Study

Residential Structure Calculations





PAIRED SALES ANALYSIS

Consider the following sales data:

- (1) All sales took place last month
- (2) All properties are single-family 3-bedroom houses
- (3) Sales 1, 2, and 3 are similar with 1 car gar except sale 1 has a finished basement.
- (4) Sales 4, 5, 6, and 7 are similar with 2 car gar except sale 4 has a finished basement. How much does a finished basement contribute to the value of houses in the market by these comps.

Sale 1	\$72,800	Sale 4	\$75,800
Sale 2	\$70,000	Sale 5	\$73,000
Sale 3	\$70,100	Sale 6	\$73,050
		Sale 7	\$73,100





PAIRED SALES ANALYSIS SOLUTION

SALE (BSMNT) - SALE (NO BSMNT) = BSMNT VAL

HOUSES WITH 1 CAR GARAGE

(SALE 1 - SALE 2) 72,800 - 70,000 = 2800

(SALE 1 - SALE 3) 72,800 - 70,100 = 2700

HOUSES WITH 2 CAR GARAGE

(SALE 4 - SALE 5) 75,800 - 73,000 = 2800

(SALE 4 - SALE 6) 75,800 - 73,050 = 2750

(SALE 4 - SALE 7) 75,800 - 73,100 = 2700

FINISHED BASEMENT CONTRIBUTES BETWEEN \$2,700 AND \$2,800 IN THIS MARKET





Residential Improvement Sales Comparison Form

There are compared There are compared FEATING	lie properies consul-	offered for safe in	sidential A	and margins in mice	from 5	the bil	60
HATMI						10.5	
	SHEET	COMPANA	LE LALE # 1	COMPANA	REMERT	COMPARAM	II LALE # 3
Mérca							
Proximity to Solvject							
Laie Price	1		1		1		1
lair Prior/Gross Lie Area	5 m.t.	1 14.2		\$ 16.2		1 mt	
Data Somrombo)							
Verification Source(s) VALUE ADJUST THE WITE	DESCRIPTION	DESCRIPTION	+(-) 1 Adjectment	DESCRIPTION	+(-) 1 Adjustment	DESCRIPTION	+(-) 1 Adjustment
Lakes or Financing		Anna de					
Concresions						L.	
Date of Sale/Time							
acation received Core Simple							
in the	1						
View							
Droigs (Dryle)							
halty of Construction							-
Actual Age Condition							
làme trade	Total Primes Boller	Teld Films, Edie		Total Stirms, States		Total Stime Sales	
Room Count							
Sense Living Area	16.7.	14.5		16.2		HA	
Paseranet & Finished Rooms Delow Study							
Fractional Billing Seating Cooling							
Secret Efficient Berns							
Barago Carport Funcia Pales Direck							
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Bet Adjustment (Total) Adjusted Sale Price		Ber Adj E	t	Ber Adj. S	1	Bette C	\$
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Date of Prior Lake/Transfer Prior of Prior Lake/Transfer	_			_		_	
Note Communical	_			_		_	
(Rectise Date of Data Source)s) Analysis of prior sale or transfer			-				7
Sennuy of Esin Conquises							
Indicated Value by Sales Compa	wison Approach 1	_					
ndicated Value by Sales Compa ndicated Value by Sales Co	ninn Approach 1 reparison Approach 1		Cod Approach (I de	misped) 1	lacense Ap	proct (f drestsped	11
edicated Value by Eales Congo adicated Value by Sales Co	eitser Approach 1 Inparises Appreach 1		Cord Approach (I de	mbpel) l	Income Ap	pract (F dreitspel	ii.
ndicated Value by Salan Co	ngarines Approach 1 n is", seliject to tolowing repairs or a	ompleton per plan dergions on the kar	and specifications is of a bygothetical	n Se boin of a by position Sat Se rep	peletical condition to sics or alterations has		
Indicated Value by Sales Con This appraisal is made completed, saliged to the bilineing required imprecion is Evened on a completio visual conditiones, and appraisant's said	nparines Appreach to in'. In subject to individually only or and on the networks I inspection of the in conflication, my (se	ompletos per plan derations on the har ey assumption that t	and specifications in of a legaritation of the condition or defici- action of the subject action value, as do to date of impact	in the basis of a big modifies that the rep every does not requir- ct property, defined doesd, of the read p ins and the effects	prietical condition to airs or alterations has alteration or repair.	d for improvements is less completed, or demand of sensorial subject of this rep- rated.	ion less insipet to the
indicated Value by Sales Compa- indicated Value by Sales Con- traction of the Con- traction o	nparines Appreach to in'. In subject to individually only or and on the networks I inspection of the in conflication, my (se	ompletos per plan derations on the har ey assumption that t	and specifications in of a hypothetical is for condition or defici	in the basis of a big modifies that the rep every does not requir- ct property, defined doesd, of the read p ins and the effects	prietical condition to airs or alterations has alteration or repair.	d for improvements is less completed, or demand of sensorial subject of this rep- rated.	hare been





Commercial Structures Valuation





Commercial Valuation Tables

- ☐ Construction Types 1, 2, 3, 4, 5
 - Building Types 001, 002, 003, 004, 005, 006, 008, 064, 099 etc. for wall height and area/perimeter tables
 - >Structural Element Categories
 - ✓ Foundation, ceiling, interior wall, heat/ac
 - **✓ BuiltAs UsedAs Types**





- Commercial buildings are usually divided into five basic cost groups by type of framing (supporting columns and beams), walls, floors and roof structures, and fireproofing.
- 1-Heavy Structural Steel
- 2-Reinforced Concrete
- 3-Masonry or Load Bearing Walls
- 4-Wood/Steel Combustible
- 5-Prefab Structural Steel





- •These building types have fireproofed steel frames that support all floor and roof loads.
- •Walls, floors, and roofs are built of noncombustible materials.







- •These building types have fireproofed, reinforced concrete frames that support all floor and roof loads or masonry floors and roofs.
- •Walls, floors, and roofs are built of noncombustible materials.







Georgia Departme

- •These building types have exterior walls of noncombustible materials such as masonry or concrete. The walls may be load bearing or non load bearing.
- •Interior partitions and roof structures are built of combustible materials.
- Floors may be concrete or wood frame.









Georgia Departme

4/26/2021

Construction Type 4

•These building types generally have wood exterior walls or wood and steel frame in bearing walls such as Masonry (Brick) Veneer, etc.









Georgia Departme

- •These building types are specialized and do not fit in the other four categories.
- Such buildings may include pre-engineered metal buildings







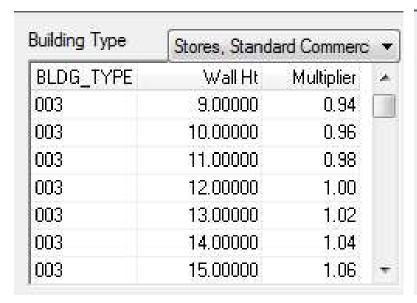
Building Types

- Categories of Commercial Improvements based on similarities in Construction Type and other components, such as Area / Perimeter and Wall Height.
- A Building Type is a homogeneous group of commercial buildings that will have the same pricing/adjustments for these additional items.





Building Types - Wall Height Tables









Building Types - Area Perimeter Tables

Building Type	Stores, Standard Commerc *			
BLDG_TYPE	A/P Ratio	Multiplier	*	
003	9.00000	1.23	ī	
003	10.00000	1.18		
003	12.00000	1.12		
003	14.00000	1.06		
003	16.00000	1.03		
003	18.00000	0.99		
003	20.00000	0.97	+	

Building Type	Garages, Ind, Warehouses ▼			
BLDG_TYPE	A/P Ratio	Multiplier		
004	16.00000	1.10		
004	18.00000	1.07		
004	20,00000	1.04		
004	25.00000	1.00		
004	30.00000	0.97		
004	35,00000	0.95		
004	40.00000	0.93	+	





Building Types – Characterized by any 3-digit number or letters

- Building Type Category Examples
- 001 Apartments, Hotels
- 002 Multiple Family, Motels
- 003 Stores and Standard Commercials
- 004 Garages, Industrials, Warehouses
- 005 Offices and Public Buildings
- 006 Churches
- 007 Sheds and AG Buildings
- 008 Schools





Building Types – Characterized by any 3-digit number or letters.

- Building Type Category Examples
- 009 Special Supplemental Cost
- 099 Miscellaneous Buildings





Structural Element Categories

- Structural Elements are types of Structural Components, such as "Ceiling Finish", "Heat / AC" or "Floor Construction".
- These may add a square foot cost to the building if using segregated costing method or they may just be used for descriptive purposes if using calculator costing method.





Structural Element Categories

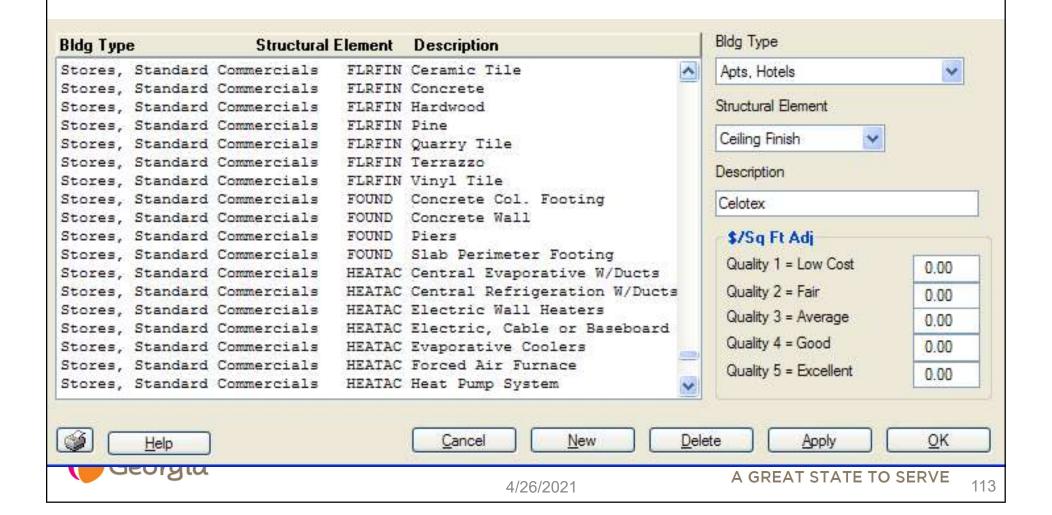
- Foundation
- Ceiling
- Interior Wall
- Wiring
- Lighting
- Exterior Wall

- Floor Finish
- Roof Cover
- Floor Construction
- Wall Frame
- Roof Frame
- ·Heat / AC





Components within Structural Element Categories

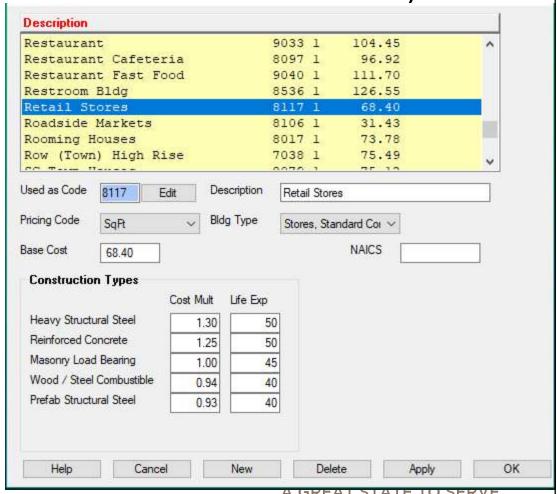




Use Types (Built-AS and Used-As Codes)

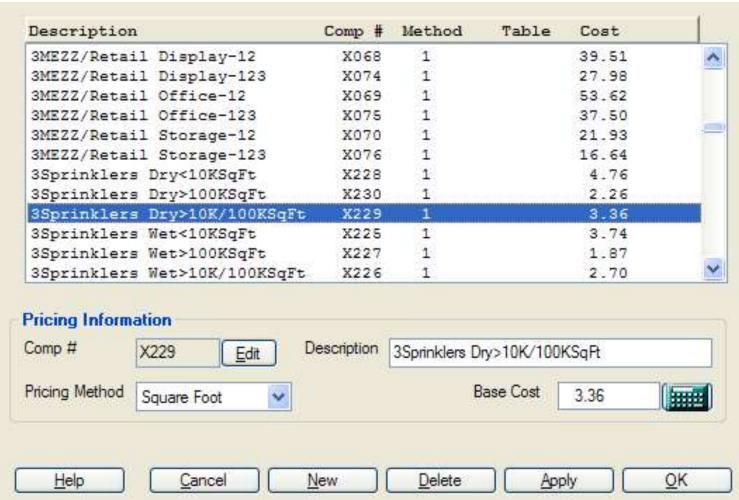
- •Within each Building Type should be subtypes for which the building was designed for.
- •These subtypes are usually referred to as Use Types.
- •The base cost of the building is usually keyed.







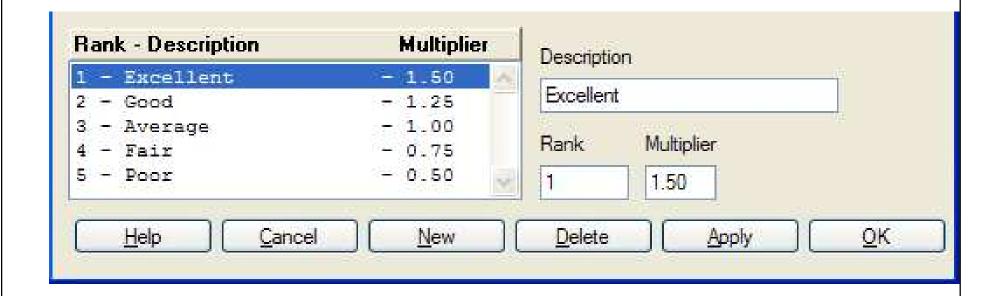
Commercial Extra Features







Commercial Extra Features Rank







Story Height Adjustments





Segregated Vs. Calculator

- •Segregated cost per square foot for major building components.
- •Calculator cost per square foot for various frame classes, occupancy types, and qualities. Additions or deductions are made for differences between similar structures.









What Factors Do We Need to Know for CAMA Calculator Method?

- Construction (Frame) Type 3
- (Building Type) Number 13
- Use Type BuiltAs-UsedAs (9033-Restaurant)
- Quality Grade –Good (130)
- Wall Height 12
- Structural Elements or Extra Feature Adds + or Takeaways – Elevators, HVAC, BSMT, MEZZ, Plumbing

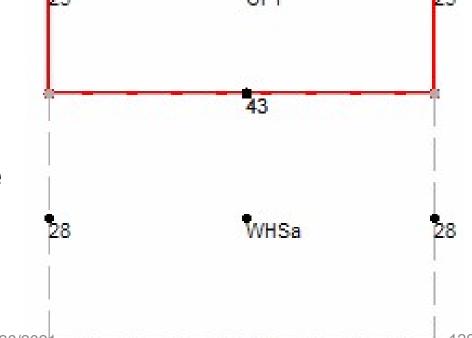




Common Wall Adjustment

•Adjustment should be made when two sections are attached and share a common wall.

•The adjustment will be based on the length of each shared wall.







EX: 150/175/200 GD: 120/130/140 AV: 90/100/110 LC: 60/70/80

Data Organization is Essential

Used_code	Bldg_type	Naics	Pc_base	Descript	Price_code	Table	Life1	Life2	Life3	Life4	Life5	Cc_mod1	Cc_mod2	Cc_mod3	Cc_mod4	Cc_mod5
8839	04		50.500000	Recycling Facilities	1	0	50	50	50	50	50	1.00	1.00	1.00	1.00	1.00
8136	03		64.050000	Region Discount Shop Cntr	1	0	50	50	50	45	45	1.24	1.24	1.00	0.93	0.92
8146	03		۸	Region Shop Cntr Shell	1	0	50	50	45	45	45	1.69	1.69	1.00	0.87	0.82
8140	03		89.350000	Regional Shop Center	1	0	50	50	45	45	45		1.47	1.00	0.94	0.93
8502	08			Relocatable Classrooms	1	0	25		b	۵	25		1.00	1.00	1.00	1.00
8596	08		70.740000	Relocatable Offices	1	0	25	25	25	۵	25		1.00	1.00	1.00	1.00
8085	02		110.370000	Residential Garages	1	0				۵	35		1.00	1.00	0.72	0.88
8097	03		96.920000	Restaurant Cafeteria	1	1	30	30	30	30	30	1.23	1.23	1.00	0.93	0.94
9040	03		111.700000	Restaurant Fast Food	1	0					35		1.30	1.00	0.93	0.92
9033	03		104.450000	Restaurant	1	0					55		1.25		0.93	0.91
8536	08		126.550000	Restroom Bldg	1	0				å	25		1.26	å	0.92	0.66
8117	03		68.400000	Retail Stores	1	0	50			å	40		1.25	1.00	0.94	0.93
8106	03		ò	Roadside Markets	1	1	30			۵	25	۵	1.00	1.00	0.87	0.86
8017	01		b	Rooming Houses	1	0	50		50	\$	45		1.00	1.00	0.93	1.00
7038	01		\$	Row (Town) High Rise	1	0					50		1.00	1.00		1.00
8079	02		b	SC Town Houses	1	0				φφ	50		1.00	ò	òò.	1.00
8809	10			SSPrefab Food Booths	1	0		20		۵	20		1.00	1.00	1.00	1.00
8808	10		79.380000	SStations W/Service Bays	1	0	20			φφ	20	1.00	1.00	1.00	1.00	1.20
8585	08			Science Bldg	1	0				۵	40		1.24	1.00	0.95	0.94
7025	07		49.850000	Secure Stg Mod Shed Bldg	1	0	25	25	25	25	25	1.00	1.00	1.00	1.00	0.40
8361	07		26.860000	Seed Process Storage MZZ	1	0	30	30	30	30	30	1.00	1.00	1.00	1.00	0.97
8804	10		56.020000	Self Serve Car Washes	1	0			30	20	25	1.00	1.00	1.00	0.94	0.92
8203	04		19.020000	Service Garage Shed	4/26/2	Ф21 _О	30	30	30	25	25	1.00	1.00	1.00	0.80	0.87 1-2-1 0.85
9138	04		42.890000	Service Repair Garage	1	0	40	40	40	35	30	1.49	1.49	1.00	0.91	¹ 20.85



What Factors Do We Need to Know for CAMA Schedule Updates?

- Determine if there are adequate defined Use Types do describe the type of commercial structures in the county.
- Determine Base Rates for Use Type BuiltAs-UsedAs (9033-Restaurant)
- Determine Base Rates for Structural Elements or Extra Feature Adds + or Takeaways – Elevators, HVAC, BSMT, MEZZ, Plumbing





RCN Case Study

•Commercial/Industrial Structure Calculations





CHAPTER 3 ESTIMATING ACCRUED DEPRECIATION

- DEPRECIATION is a loss in utility and value from any CAUSE. (Physical Deterioration or **Obsolescence**)
- Types of Physical Deterioration:
 - Wear and Tear
 - Decay
 - Dry Rot
 - Cracks
 - Encrustation
 - Structural Defects





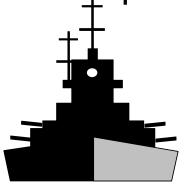


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CHAPTER 3 ESTIMATING ACCRUED DEPRECIATION

- Functional obsolescence
 - Design deficiency
 - Inadequacy
 - Superadequacy











FUNCTIONAL OBSOLESCENCE

•FUNCTIONAL OBSOLESCENCE CURABLE

- Design deficiency that can be replaced or redesigned at a relatively low cost.
- Curable if economically feasible to fix or if you can recover the cost to fix it

- Needs additional bath or bedroom where space is available
- Inadequate electrical wiring
- Insufficient storage
- No parking
- Not enough phone jacks or electrical outlets

Measured by:

- Cost to cure
- GRM or GIM
- MKT Comparison to serve







FUNCTIONAL OBSOLESCENCE

•FUNCTIONAL OBSOLESCENCE INCURABLE

- Design deficiency that is not economically feasible to remedy.
- Cost more to fix it than you can make up in sale or rent

- Poor design
- Out of date design or equipment
- 4 car garage
- Measured by:
- GRM or GIM
- MKT Comparison







ECONOMIC OBSOLESCENCE

- Obsolescence caused by external forces to the property.
- Incurable in most instances





- Environmental problems
- Encroaching commercial area toward a residential neighborhood
- Residential houses next to railroad tracks
- Residential houses within the flight path of an airport
- Measured by:
- GRM or GIM *must back out loss to land using LtoB ratio



4/26/2021 MKT Comparison to serve



DEFINITION OF TERMS

- TOTAL ECONOMIC LIFE Total period of time that the improvements contributes value to the property. Formula: (REL+EFF AGE=TEL)
- ACTUAL AGE Number of years lapsed since the original structure was built. (Chronological age or Historical age.)
- EFFECTIVE AGE The age of a building based on the actual wear and tear and maintenance, or the lack of it, that the building has received.
- REMAINING ECONOMIC LIFE Period of time from the date of appraisal to the end of the improvement's economic life.(REL+EFF AGE=TEL) or (TEL-Eff Age=REL)





5 METHODS OF MEASURING DEPRECIATION

1. Age/Life

- Cost of building is depreciated at a fixed annual percentage rate.
- Uses straight line depreciation tables.

2. Modified Age/Life

Straight Line with EXTRA

3. Engineering Breakdown

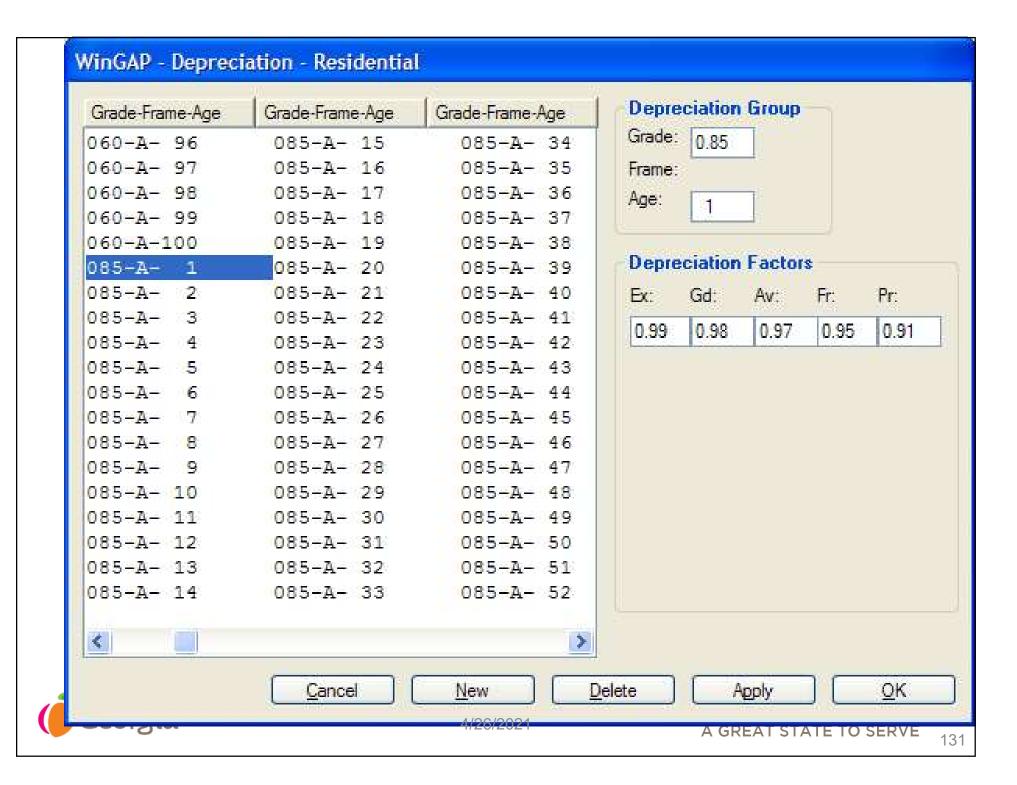
• Detailed age-life method that can be used in quantity survey and unit-inplace cost method. Each building component is depreciated separately.

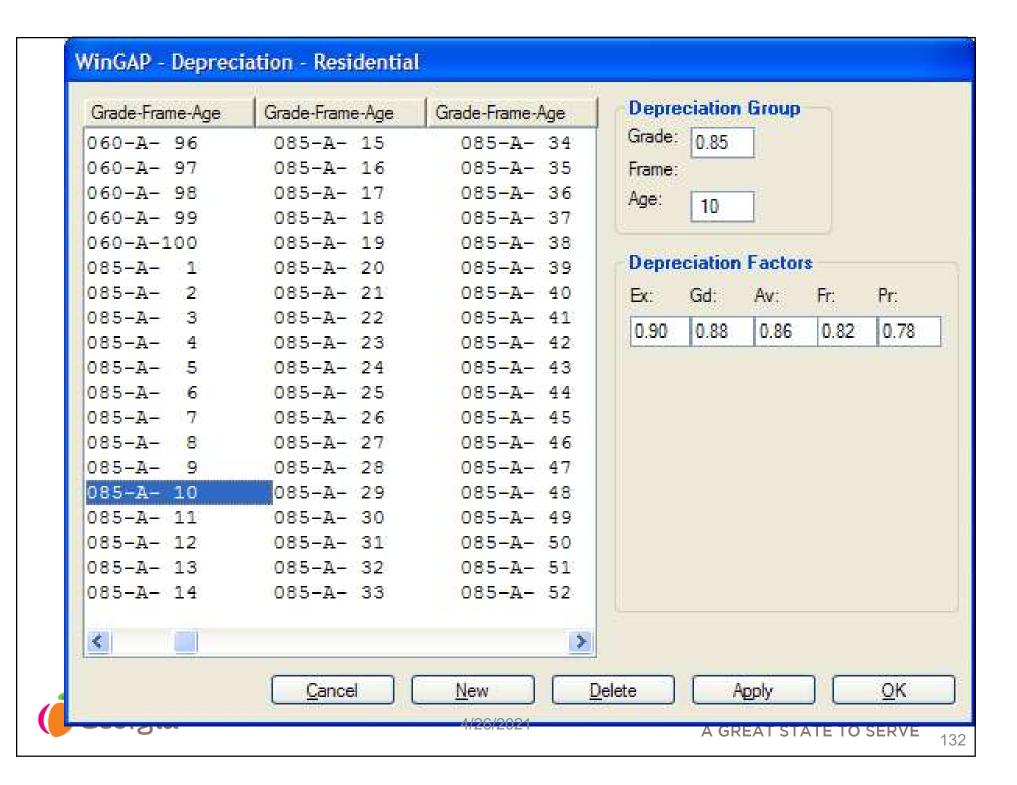
4. Observed Condition

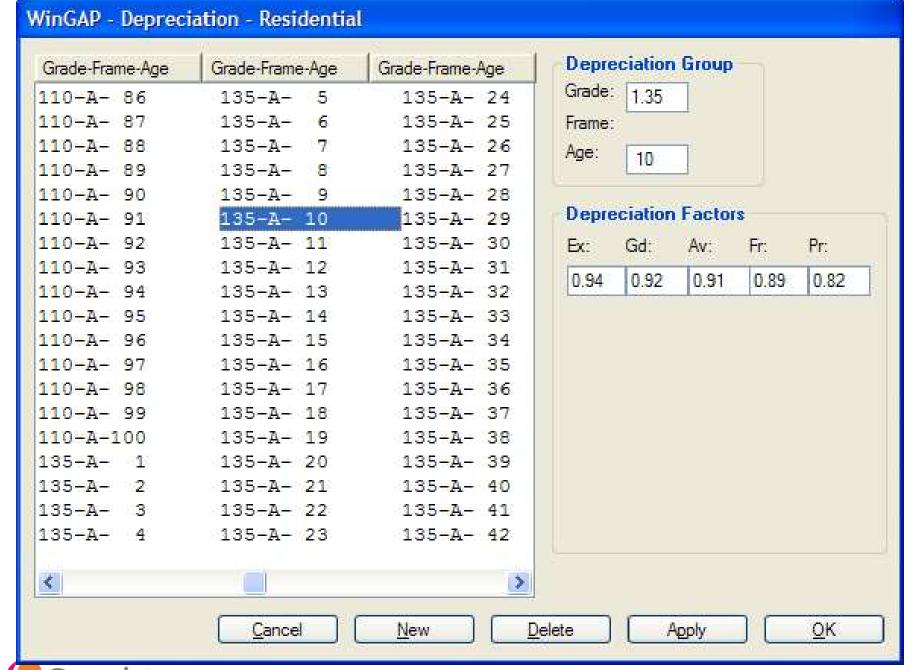
 Most Detailed method of estimating depreciation that breaks down depreciation into all components (curable, incurable)

5. Sales Comparison Approach

Calculated from the Market









Commercial Life Expectancies

Used_code	Bldg_type	Naics	Pc_base	Descript	Price_code	Table	Life1	Life2	Life3	Life4	Life5
8839	04		50.500000	Recycling Facilities	1	0	50	50	50	50	50
8136	03		64.050000	Region Discount Shop Cntr	1	0	50	50	50	45	45
8146	03		36.160000	Region Shop Cntr Shell	1	0	50	50	45	45	45
8140	03		89.350000	Regional Shop Center	1	0	50	50	45	45	45
8502	08		77.370000	Relocatable Classrooms	1	0	25	25	25	25	25
8596	08		70.740000	Relocatable Offices	1	0	25	25	25	25	25
8085	02		110.370000	Residential Garages	1	0	40	40	40	35	35
8097	03		96.920000	Restaurant Cafeteria	1	1	30	30	30	30	30
9040	03		111.700000	Restaurant Fast Food	1	0	40	40	35	35	35
9033	03		104.450000	Restaurant	1	0	40	40	35	35	55
8536	08		126,550000	Restroom Bldg	1	0	35	35	30	25	25
8117	03		68.400000	Retail Stores 4/26/2021	1	0	50	50	45	40	1310



Commercial Depreciation Schedules

Grade-Fra	me-Age	Grade-Fram	e-Age	Grade-Frame-Age		
100-A-	1	100-A-	20	100-A-	39	
100-A-	2	100-A-	21	100-A-	40	
100-A-	3	100-A-	22	100-A-	41	
100-A-	4	100-A-	23	100-A-	42	
100-A-	5	100-A-	24	100-A-	43	
100-A-	6	100-A-	25	100-A-	44	
100-A-	7	100-A-	26	100-A-	45	
100-A-	8	100-A-	27	100-A-	46	
100-A-	9	100-A-	28	100-A-	47	
100-A-	10	100-A-	29	100-A-	48	
100-A-	11	100-A-	30	100-A-	49	
100-A-	12	100-A-	31	100-A-	50	
100-A-	13	100-A-	32	100-A-	51	
100-A-	14	100-A-	33	100-A-	52	
100-A-	15	100-A-	34	100-A-	53	
100-A-	16	100-A-	35	100-A-	54	
100-A-	17	100-A-	36	100-A-	55	
100-A-	18	100-A-	37	100-A-	56	
100-A-	19	100-A-	38	100-A-	57	
	100			1/26/	2021	

Depreciation Group					
Grade:	1.00				
Frame:					
Age:	10				

Depreciation Factors

5:	10:	15:	20:	25:
0.00	0.21	0.43	0.60	0.71
30:	35:	40:	45:	50:
0.79	0.85	0.89	0.92	0.94
55:	60:	65:	70:	75:
0.96	0.97	0.97	0.98	0.98



4/26/2021

A GREAT STATE TO SERVE

136



Observed Condition Method

Measures physical deterioration and functional obsolescence

Looks at 3 Groups (hair/skin, muscles,

skeleton)

Georgia®

Curable deferred maintenance

- Incurable short lived
- Incurable long lived



4/26/2021



A GREAT STATE TO SERVE



A GREAT STATE TO SERVE





OBSERVED CONDITION METHOD

PHYSICAL DETERIORATION CURABLE (hair/skin)

- Deferred maintenance
- Measured by the cost to cure

- Loose shingles
- Paint
- Loose floor tiles
- Cracked window pane







OBSERVED CONDITION METHOD

■INCURABLE PHYSICAL
DETERIORATION ("physical deterioration incurable postponed"; Also known as "curable physical postponed" if item totally worn out)

- Not going to do it every year, usually postponed
- 1. SHORT LIVED-Muscle
 - Components whose remaining physical life is shorter than the total remaining economic life
 - Roof cover
 - Gutters
 - Plumbing fixtures

MEASURED BY AGE LIFE
 YOUNGETHOD

2. LONG LIVED-Skeleton

- Usually depreciated as a group by making an estimate of their effective age and remaining physical life based on their condition
- Footings
- Foundation
- Floor structure
- Frame and Walls
- Roof structure
- Piping, Ducts, Insulation, Wiring
 MEASURED BY AGE LIFE METHOD



AGE LIFE METHOD

- EFFECTIVE AGE DIVIDED BY TYPICAL ECONOMIC LIFE
- Effective age = 10 yrs
- TEL = 50 yrs
- 10 / 50 = 20% Depreciation





PHYSICAL DETERIORATION PROBLEM

Information is as follows:

RCN of house is \$94225 TEL=50 years EFF AGE = 5
CURABLE ITEMS

Exterior Trim needs painting - Reproduction cost new is \$150; cost to cure \$180; Loose Shingle - Reproduction cost new is \$100; cost to cure \$125; Leaky faucets in bathrooms - reproduction cost new is \$75; cost to cure \$100.

INCURABLE ITEMS (SHORT LIVED)

water heater RCN 400 TEL 5 EA 2; Plumb RCN \$4000 TEL 15 EA 5; HA/C RCN \$5000 TEL 20 EA 5; Electric Outlet RCN \$2000 TEL 15 EA 5; Roof RCN \$2500 TEL 25 EA 5;





	PHYSICAL	DETERIORATION PROBLE	M RCN BLDG 94225
•RCN=\$94225	TEL=50	YRS	- <u>14225 (</u> 325+13900)
•EFF AGE=5YRS			= <u>14223 (</u> 323 113700) = 80000 Basic Skeleton
 Curable Physical 	r		\$80000X(5/50).1000=8000
•ITEM	RCN	COST/CURE	+405cc
Paint trim	\$ 150	\$ 180	+3910\$dep
Loose shingle	\$ 100	\$ 125	Total Physical Deterioration
Leaky faucets	<u>\$ 75</u>	<u>\$ 100</u>	=\$12315
• <u>Total</u>	\$ 325	\$ 405	12315/94225 = .13
			1.0013 = .87 percent good
·ITEM RCN	EA TE	L %DEP	\$DEP
•W/HT \$ 400	2 5	.4000	160
•PLMB \$4000	5 15	.3333	1333
•HA/C \$5000	5 20	.2500	1250
•ELEC \$2000	5 15	.3333	667
•ROOF <u>\$2500</u>	5 2	.2000	<u>500</u>
•TOT \$13900		TOTAL	\$3910



PHYSICAL DETERIORATION PROBLEM

Information is as follows:

RCN of house is \$100,000 TEL=50 years EFF AGE = 2 CURABLE ITEMS

Room needs painting - Reproduction cost new is \$120; cost to cure \$200; Loose Brick - Reproduction cost new is \$150; cost to cure \$175; Broke Win/Pane reproduction cost new is \$50; cost to cure \$105.

INCURABLE ITEMS (SHORT LIVED)

water heater RCN \$400 TEL 5 EA 3; Plumb RCN \$4000 TEL 15 EA 6; HA/C RCN \$5000 TEL 20 EA 6; Electric outlet RCN \$2000 TEL 15 EA 6; Roof RCN \$2500 TEL 25 EA 6;





PHYSICAL DETERIORATION PROBLEM

What is the depreciation in the subject?

Information is as follows:

CURABLE ITEMS

Garage needs painting - Reproduction cost new is \$100; cost to cure \$120; Loose Tiles - Reproduction cost new is \$150; cost to cure \$180; Leaky faucets in 2 Bathrooms Total for both – reproduction cost new is \$90; cost to cure \$110.

INCURABLE ITEMS (SHORT LIVED)

water heater RCN 4500 TEL 5 EA 4; Plumb RCN \$4500 TEL 15 EA 7; HA/C RCN \$6000 TEL 20 EA 7; Electric outlet RCN \$1000 TEL 15 EA 7; Roof RCN \$2100 TEL 25 EA 7;





SALES COMPARISON METHOD

- Recent sale of land and building is \$65,000
- Subject being appraised estimated RCN is \$56,800 and 30 yrs old
- What is the % depreciation and the FMV of the Subject
- Formulas: (Sale Price Land Value = Bldg Value)
- (D\$ = RCN BV)
- D% = D\$ / RCN
- Solution:

•	Sale Price	\$65,000
•	Land Value	- <u>\$30,000</u>
_	Decidual Duilding Value	625 000

Residual Building Value \$35,000 RCN Bldg \$55,000

- RCN \$55,000 Residual Bldg Value \$35,000 = \$20,000 depreciation
- Dep \$20,000 / RCN \$55,000= 0.364 or 36.4% dep
- Subject House RCN \$56,800 X 0.364 = \$20,675 Depreciation
- \$56,800 \$20,675 = \$36,125 FMV of Subject Structure





William Control			
 COMPAR 	ABLE SALES	(D = RCN - BV) (%Dep=Dep\$ / RCN)	
• Sale	Price RCN	RCN \$104,000 - BV \$80,000 = \$24,000 DEP \$24,000/\$104,000 = 0.2308	
\$100,000 \$110,000	\$104,000 \$119,000	RCN \$119,000 - BV \$90,000=\$29,000 DEP \$29,000/\$119,000=0.2437 RCN \$130,000 - BV \$100,000=\$30,000 DEP	
\$120,000 \$105,000	\$130,000 \$111,000	\$30,000/\$130,000=0.2308 RCN \$111,000 - BV \$85,000=\$26,000 DEP	
• Land Valu \$20,000	ue of lots in area is	\$26,000/\$111,000=0.2342	
 Subject F 	RCN is \$105,000		

- What is the % depreciation and depreciated value of the subject house?
- What is Total Value of **Property?**

•Sale Price - Land Value = Bldg Value

\$100,000 - \$20,000 = \$80,000

\$110,000 - \$20,000 = \$90,000

\$120,000 - \$20,000 = \$100,000

\$105,000 - **\$**20,000 = **\$**85,000

Subject RCN \$105,000 X 0.23 = \$24,150

Value of Subject Property is:

\$105,000

- \$24,150 Dep

= \$80,850

+ \$20,000 LV

=\$100,850 TOTAL VALUE OF PROPERTY

Georgia®

•	Sale Price	RCN	(D = RCN - BV) (%Dep=Dep\$ / RCN)
# 200 00	0 0040.000	^	RCN \$310,000 - BV \$220,000 = \$90,000 DEP
\$300,00	0 \$310,000	U	\$90,000 / \$310,000 = 0.2903
\$310,00	0 \$322,500	0	RCN \$322,500 - BV \$230,000=\$92,500 DEP
\$330,00	0 \$350,200	0	\$92,500/\$322,500=0.2868
\$305,00	0 \$315,000	0	RCN \$350,200 - BV \$250,000=\$100,200 DEP
• la	and Value of lots in	aroa ie	\$100,200/\$350,200=0.2861
	10,000	ai c a 15	RCN \$315,000 - BV \$225,000=\$90,000 DEP
-	ubject RCN is \$305,0	000	\$90,000/\$315,000=0.2857
	•		
• W	hat is the % depreci	iation and	

depreciated value of the subject house?

Subject RCN \$305,000 X 0.29 = \$88,450

What is Total Value of Property? Value of Subject Property is:

\$305,000 •Sale Price – Land Value = Bldg Value - \$88,450 Dep \$300,000 - \$80,000 = \$220,000 = \$216,550 \$310,000 - \$80,000 = \$230,000 + \$80,000 LV \$330,000 - \$80,000 = \$250,000 \$305,000 - \$80,000 = \$225,000 =\$296,550 TOTAL VALUE OF PROPERTY



CALCULATING VALUE USING GRM

·SP RENT •GRM

•\$105,200 \$485 ·216.91

•\$107,750 \$500 ·215.50

•\$108,900 \$505 **•215.64**

•\$106,910 \$495 **•215.98**

\$485 **•216.82 •**\$105,160

What is the GRM?

What is the value of subject property if it rents for \$515 per month? 515 X 216 = \$111,240 eorgia®



CALCULATING VALUE USING GIM

SUBJECTS ANNUAL INCOME=\$102,000

• SP INCOME GIM

\$798,000
 \$95,000

\$875,500\$103,000

\$731,000\$86,000

\$796,000\$91,500

\$905,250\$106,300

- WHAT IS THE GIM and Value using the above Annual Income?
- \$





CALCULATING VALUE USING GRM

•SP RENT

•\$55,200 \$480

•\$57,750 \$500

•\$60,900 \$525

•\$62,910 \$540

•\$59,160 \$510

What is the GRM?
What is the value of subject property if it rents for \$515
per month?
eorgia®



ESTIMATING INCURABLE FUNCTIONAL OBSOLESCENCE USING GRM

- MONTHLY RENT OF COMP WITHOUT DEFECT \$245/MTH
- MONTHLY RENT OF SUBJECT WITH DEFECT \$230/MTH
- MONTHLY RENTAL LOSS \$15
- GRM FOR AREA From Comparable Information = 116
- EST LOSS OF VALUE IS \$15X116=\$1740(DEP LOSS)





ESTIMATING INCURABLE FUNCTIONAL OBSOLESCENCE USING GRM

- MONTHLY RENT OF COMP WITHOUT DEFECT \$550/MTH
- MONTHLY RENT OF SUBJECT WITH DEFECT \$500/MTH
- CALCULATE MONTHLY RENTAL LOSS
- ESTIMATE GRM FOR AREA From Comparable Information
- ESTIMATE THE FUNCTIONAL DEPRECIATION
- 50 X 216 = 10,800 functional dep





ECONOMIC OBSOLESCENCE - Calculating

- Uses sales comparison method and GRM TO MEASURE
- RESIDENTIAL COMPARABLE PROPERTY IN GOOD LOCATION RENTS FOR \$545 PER MONTH
- SUBJECT PROPERTY IN BAD LOCATION RENTS FOR \$510 PER MONTH
- LAND TO BUILDING RATIO IS 1:4
- MARKET INFORMATION IS AS FOLLOWS:





ECONOMIC OB. PROBLEM

SP MONTHLY INCOME

• \$52500 \$490

• \$53400 **\$500**

• \$56000 **\$525**

• \$50400 \$470

• \$57200 **\$535**

 What is the GRM and the economic loss in value to the building?





ECONOMIC OB. PROB. CONT

- \$52500/490=107.14
- \$53400/500=106.80
- \$56000/525=106.67
- \$50400/470=107.23
- \$57200/535=106.91
- GRM = 107
- land to bldg ratio 1:4 (1+4=5)
- $$545 $510 = $35 \times 107(GRM) = 3745/5 = 749$
- 3745-749=2996 Loss to Bldg.
- Loss to Building due to economic obsolescence





ECONOMIC OBS. USING MATCHED PAIRED SALES

- SP, HOUSE D WITH POOL AWAY FROM SANITATION SITE \$80,000
- SP, HOUSE E WITH NO POOL NEXT TO SANITATION SITE \$60,000
- DIFFERENCE \$80,000 \$60,000 = \$20,000
- DIFFERENCE BETWEEN VALUE OF POOL AND NO POOL IS \$11,000
- INDICATED DIFFERENCE IN VALUE CAUSED BY SANITATION SITE \$20,000 - \$11,000 = \$9,000
- (1:4 LAND TO BLDG RATIO) WHAT IS VALUE LOSS TO IMPROVEMENT? 1+4=5 LAND = 1 PART
- 1/5 = .20 LAND .80 BLDG X \$9000 = \$7,200





Additive Method Calculation of Depreciation

RCN x % Physical DEP = PHY DEP

RCN x % Functional DEP = FUNC DEP

RCN Less FUNCTIONAL and PHYSICAL= FMV

FMV * any other factors

+ Land = Total Fair market value of Property.





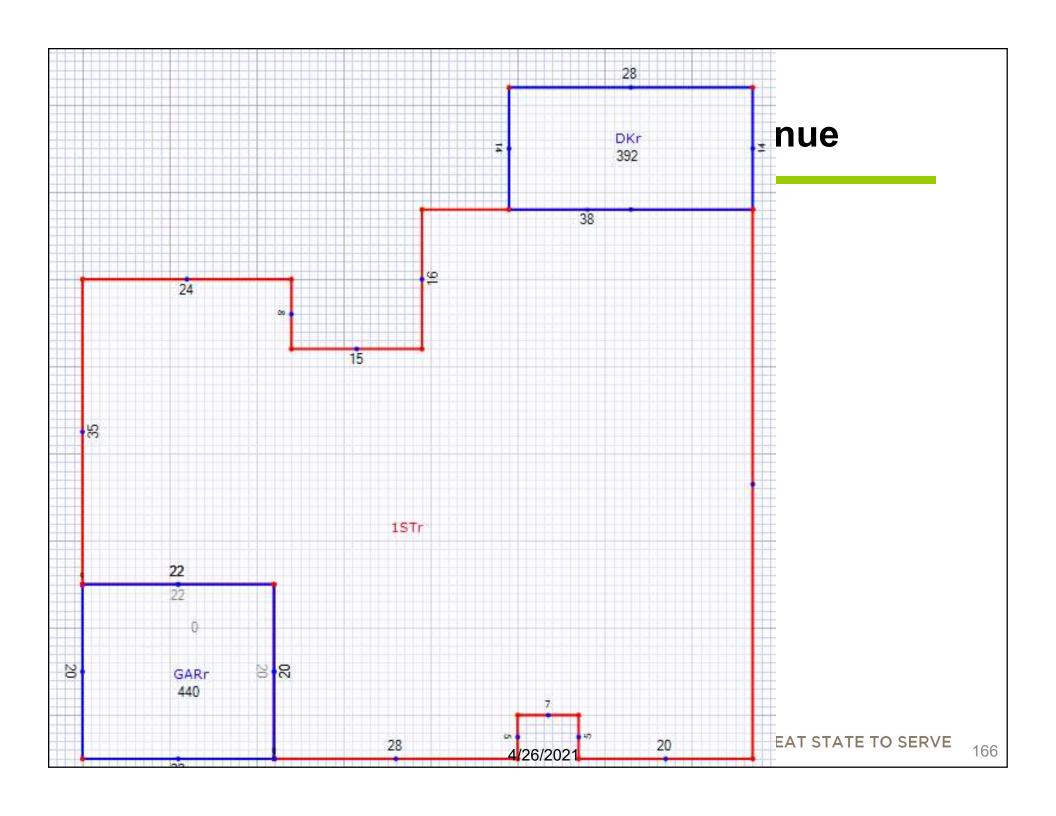
Depreciation and Influences

RCN = 100,000
PHYSICAL DEP = 2%
FUNCTIONAL OBSOLESCENCE 5%
NEIGHBORHOOD/LOCATION MODIFIER TO BLDG 1.10
LAND VALUE=25,000

100,000 X 2% = - 2000 100,000 X 5% = - 5000 100,000 - 7000 = 93,000

93,000 X 1.10 = 102,300 FMV + Land 25,000 = \$127,300 Total FMV of Property







House Calculation

Base Cost \$58.09 (Includes 5 plumbing fixtures)

1 Additional Fixture @ \$450

1 Rough in @ \$230

Forced Hot and Cool Air @ \$3 per sq ft

Hardwood Floors @ \$4.50 per Sq Ft

Fireplace @ \$4000

Entry Patio @ \$15 per sq ft

Gar @ \$25

Wood Deck @ \$8

Note: Each Form of Depreciation should be calculated from RCN

Physical Depreciation @ 2%

Functional Obsolescence @ 1%

Location/Neighborhood Modifier for structure being on Lake of 20% Land Value 40,000 (lake front lot)

SSRatio		5	6		8	9	10				
Factor	1.32	1.19	1.11	1.04	1.00	0.97	0.94	0.92	0.90	0.89	0.87





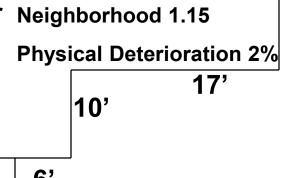
Calculate the Square Footage of This Residence, Garage, and

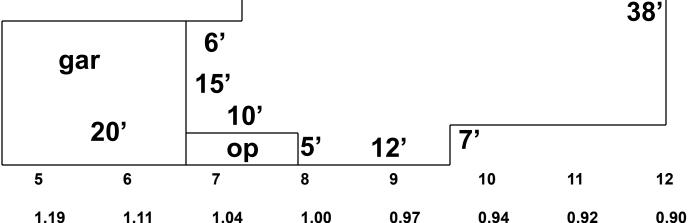


4 Additional fixtures @ 1,200 per Neighborhood 1.15 fixture

1 Extra rough-in @ 500

Range/oven 1,525





SSRatio



Very good 1St, Masonry Veneer

Gar \$25 per sq ft

Base cost 75.41

Op \$7 per sq ft

Heat Pump 2.07

4 Extra Bath Fixtures @ 1,200 per fixture

1 Additional rough-in @ 500

Range/oven 1,525

Subtotal

Neighborhood 1.15

2% Depreciation

Land Value 40,000





CHAPTER 4 - SITE VALUATION, ANALYSIS AND ADJUSTMENTS

 SITE VALUATION = The only source of values for sites is the local market inasmuch as land cannot be produced or built like improvements. Land NEVER depreciates.





ELEMENTS OF COMPARISON:

- Qualitative 5 Elements appraiser should consider in valuing comparables.
- 1. Location, Location
 - Most Important
- 2. Economic Trends and Factors
 - Financing and growth of community
- 3. Date of Sale
- 4. Physical Characteristics
 - Topo, water, View, other
- 5. Condition of sale (arm's length, Foreclosure Resales, Distressed sales.)





UNITS OF COMPARISON:

- Quantitative 5 elements for land valuation.
- Market analysis determines which method to use.
 - 1. Front Foot
 - 2. Square Foot
 - 3. Acre and Section
 - 4. Site (Lots)
 - 5. Units Buildable







4/26/2021



Front Foot Example

- a comparable lot sold for \$25,000
- the lot fronts on a street 100 ft
- the lot has a depth of 200 ft
- standard DEPTH OF LOTS IS 200 FT
- calculate the price per front foot ?
- \$25,000 / 100' =
- \$250 per front foot
- What is the value of a subject lot that fronts on the street 180'?
- 180' x \$250 x 1.00 depth factor = \$45000





SQUARE FOOT EXAMPLE

- Subject consists of 20,000 sq feet
- Comparable sales indicate 50 cents per sq ft. for this type of property.
- What is the value of subject property?
- 20,000 X \$0.50 = \$10,000





ACRE AND SECTION EX.

- 150 Acres sold for \$260,000
- What is the price per acre if all one productivity class of land?
- ((\$260,000 60,000 Timber Value) / 150)
 ac = \$1,333 per acre





Site or Lot

- A planned unit subdivision contains 25 lots of similar size, shape, and topography. Five of these Lots have sold within the last 2 months as follows:
- Lot 22 sold for \$14,550
- Lot 18 sold for \$15,330
- Lot 12 sold for \$ 14,700
- Lot 9 sold for \$15,100
- Lot 5 sold for \$14,800
- Value all lots at \$15,000





UNITS BUILDABLE EXAMPLE

- A comparable sold for \$800,000
- zoning allows 40 units per acre
- What is the price per unit?
- \$800,000 / 40 = \$20,000 per unit
- Zoning allows 60 units per acre on subject property
- What is FMV of Subject ?
- 60 X \$20,000 = 1,200,000





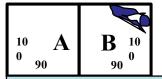
Units Buildable Vs. Square Feet

Sale	Sale Price	Sq. Ft.	Price/ Sq.Ft.	Units	Price/ Unit
1	200,000	200,000	1.00	200	1000
2	225,000	240,000		210	
3	295,000	300,000		290	
4	280,000	300,000		282	
5	175,000	160,000		160	
6	275,000	288,000		275	





A- Zoning allows density of development 4 story 50 units



B - Zoning allows density of development 4 story 40 units

Main Street

4/9/20210

What unit of measure is best to value both

lots?

Front Foot

Square foot

Lot or Site

Units Buildable





Land Market Analysis

Which units 1-5 apply to the examples for A-G?

- A. Timberland 50 acres
- **B.** Furniture Store and Auto Dealership
- C. PUD Planned Unit Subdivision (All lots of similar shape & size)
- D. Large Manufacturing site 25 acres
- E. Small rural tracts
- F. Convenience Store and lot
- G. High Rise 20 Story Apartment complex (Properties that can be developed to a greater degree of density)

- 1. Front Foot
- 2. Square Foot
- 3. Acre & Section
- 4. Site (Lot)
- 5. Units Buildable





CHAPTER 5 - METHODS OF LAND VALUATION

- Market or Direct Sales Comparison
- Cost of Development or Anticipated
 Use
- Allocation and Abstraction
- Land Residual Capitalization
- Capitalization of Ground Rents





SUBDIVNAME	SUBDIVCODE CALCMETHOD	DIL	INITVALUE	EXUNITS	EXFACTOR	DEPTHTBL	-
MO-2 < 1.00 AC	397	2	10000.00	0.00	0.00	0	
MO-2 > 6 ACS	400	2	2000.00	0.00	0,00	0	
MO-2-W/FF	395	1	250.00	0.00	0.00	0	
MO-2-W/SF	396	3	3.00	0.00	0.00	.0	
MOLLIE VINCENT EST	501	2	2500.00	0.00	0.00	0	
MOONSHINE MTN >2AC	257	2	2500.00	0.00	0.00	0	
MOONSHINE MTN/AC0-2	256	2	8000.00	0.00	0.00	0	-
MOONSHINE MTN/FF	255	1	70.00	0.00	0.00	0	
MORG HWOOD ACS >3ACS	526	2	4000.00	0.00	0.00	0	
MORGANTON PT-C85.00	60	1	85.00	0.00	0.00	0	
MORGANTON PT-R35.00	59	1	35.00	0.00	0.00	0	
MORGNTON HRDWOOD ACS	525	2	7500.00	0.00	0.00	0	
MOUNTAIN ST-C128.00	35	1	128.00	0.00	0.00	0	
MOUNTAIN ST-R51.00	32	1	51.00	0.00	0.00	0	
MOLINTAIN VIEW SZD		2	19500.00	0.00	0.00	n	*
•						>	
Information				10.			
Name ADA ST-R26.00	Unit Value		26.00		Default Dep	th	
Valuation Method	Excessive Units		0.00		None	~	
ente distribuit de l'actionne de	Excessive Adj Fac	tor	0.00				
Front Foot (1)	(3)		1,350.33	1			
O Acres (2) O Lot / Unit (4)							



Making Adjustments Using Units Of Comparison:

- 1. Only make adjustments to comparable, NEVER to the subject
- 2. Do it on a plus/minus basis
 - Two Rules of Thumb for making adjustments area.
 - CBS-Comparable better subtract
 - CIA-Comparable inferior add





Making Adjustments Using Units Of Comparison:

Subject 150 acres, Located on a Mountain in North Ga, Clear Cut Timberland (not replanted).

- Sale 1 50 acres, \$100,000 saleprice, Located in Valley, All Pasture Land. 1 Yr Old sale.
- Sale 2 148 acres, \$200,000 saleprice, Located in Valley, Clear Cut Timberland (not replanted). Current year Sale.

Inflation 4% per year
Mountain property commands 5% more than Valley.
Timberland command 10% more than pasture.
Which sale is the best sale to use for the subject price and What is the subject value.



Georgia Department of Revenue EXAMPLE OF A GRID FOR SALES COMPARISON PROBLEMS.

SUBJ		SALE 1	SALE 2	SALE 3	SALE 4
	SP				
	ACRES				
	PR/Acre				
	Sale Date TIME				
	TIME ADJ PR / ACRE				
	FACTOR 1				
	FACTOR 2				
	NET ADJ				



VALUE



Land Sales Comparison Form



Adobe Acrobat Document



Adobe Acrobat Document





CBS CIA Time 4%

T10%>P

M5%>V

Subject	Factors	Sale1	Sale2	
	Sale Price	100,000	200,000	
150	Acres	50	148	
	Date sale	1 year	Current	
	Price/acre	2,000	1,351	
	Tm Adj	4%x1year old	No Adjustment	
		+.04	Current	
	Tm Adj/ac	2,000x.04=80		
		2,000+80=2,080	1,351	
Mountain	Location	Valley	Valley	
		CIA + .05	CIA + .05	
Timberland	Topography	Pasture	No Adjustment	
		CIA + .10	Timberland	
	Net	+.15	+.05	
	Adustjment			
	Adjusted	2,080x.15 = +312	1,351x.05 = +68	
	Pr/Ac	2,080+312=2,392	1,351+68=1,419	



Sale #2 has the least number of adjustments.

150 acs x 1,419 = 212,850 value of subject. $\frac{4}{26}$ /2021



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Sale #	Size	Location	Sale Price
1	200 x 250	Interior	\$25,000
2	200 x 250	Interior	\$26,000
3	200 x 250	Interior	\$27,000
4	300 x 250	Interior	\$35,750
5	200 x 250	Lake	\$40,000
6	300 x 250	Lake	\$49,000

- Residential land in a given neighborhood tends to sell on a per lot basis except for lots with excessive width, which sell slightly higher. Location also affects prices.
- The base lot is a standard size interior lot.
- 1. Estimate the appropriate adjustments for excessive width, and location (lake).
- 2. Adjust the sales to the base lot and determine the base lot value.
- 3. Using the base lot method, what would be the indicated value of a lot with excess width located on the lake?



Sale #	Size	Location	Sale Price
1	200 x 250	Interior	<mark>\$25,000</mark>
2	200 x 250	Interior	<mark>\$26,000</mark>
3	200 x 250	Interior	<mark>\$27,000</mark>
4	300 x 250	Interior	\$35,750
5	200 x 250	Lake	\$40,000
6	300 x 250	Lake	\$49,000

 Base Lot Value Range \$25,000 to \$27,000. Use \$26,000 for the Base Lot





Sale #	Size	Location	Sale Price
1	200 x 250	Interior	\$25,000
2	200 x 250	Interior	\$26,000
3	200 x 250	Interior	\$27,000
4	300 x 250	Interior	\$35,750
5	200 x 250	Lake	\$40,000
6	300 x 250	Lake	\$49,000

- Base Lot Value Range \$25,000 to \$27,000. Use \$26,000 for the Base Lot
- Excessive Width Compare Sale #4 with Sales #1 3

•	Sales #	<u>Sale #4</u>		Sale Price	1
•	1 \$35,750	-	\$25,000	=	\$ 10,750
2	\$35,750	-	\$26,000	=	\$ 9,750
3	\$35,750	-	\$27,000	=	\$ 8,750

Lake View – Compare Sale #5 with Sales # 1 - 3

•	1	\$40,000	-	\$25,000	=	\$ 15,000
2	\$40	0,000	-	\$26,000	=	\$ 14,000
•	3	\$40,000	-	\$27,000	=	\$ 13,000

- Indicated Base Lot Value analyzing 1,2,3 that are similar \$26,000
 Indicated adjustment for Excessive Width \$9,750
- Indicated adjustment for Location (Lake) + \$ 14,000
- Value of Excessive Width interior lot \$26,000 + \$9,750 = \$37,750
- Value of Excessive Width/Location Lake\$26,000 + \$23,750 (9,750+14,000) = \$49,750





LAND DEVELOPMENT OR ANTICIPATED USE METHOD

- Employs the principle of SURPLUS PRODUCTIVITY - net income remaining after the 4 agents of production (labor, management, capital, land)
- Income earned by the land





ANTICIPATED USE PROBLEM:

- An owner has a 50 acre tract of land
- The tract can be cut into 50 lots
- Local market data shows that lots in the area are worth \$30,000 each
- Discount rate of 12%, projected sell out time 2 years
- Note: Present worth of one factors; at a 12 percent discount rate are .8929 for one year; .7972 for two years;
- Expenses will be incurred in the first year.
- Site Development is \$250,000
- Overhead and Sales Expenses are \$170,000
- Profit, is \$150,000
- What is the Raw Land Value?
- What is th Raw Land Price per acre?





ANSWER TO ANTICIPATED USE PROBLEM

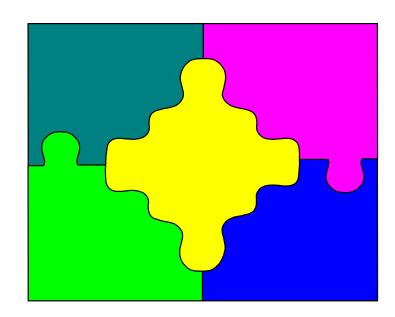
- 25 lots X \$30,000 X .8929 = \$669,675
- 25 lots X \$30,000 X .7972 = \$597,900
- Total = \$1,267,575
- Site Develop \$250,000
- Overhead & sales \$170,000
- Profit <u>- \$150,000 fixx the rest of the problem</u>
- Total Expenses = \$550,000 X .8929 = \$491,095
- \$1,267,575 \$491,095 = \$776,480
- Value per acre
- \$776,480 / 50 acres = \$15,530 per acre or per lot
- 15,530 / \$30,000 = .518 absorption factor





ALLOCATION – Finding Land Value

- ALLOCATION METHOD Separating a comparable sale into it's component parts.
- Ex. Sale is \$100,000
- land to building ratio is 1:4
- What is the land value?
- Ratio of 1 to 4 equals 5 total parts
- \$100,000/5=\$20,000
- Convert to Percentage
- Land Ratio 1 / 5 = .20
- Building 4 / 5 = .80







ALLOCATION – Finding Land Value

- ALLOCATION METHOD Separating a comparable sale into it's component parts.
- Ex. Sale is \$125,000
- land to building ratio is 1:4
- What is the land value?





ALLOCATION – Finding Land Value

- ALLOCATION METHOD Separating a comparable sale into it's component parts.
- Ex. Sale is \$235,000
- land to building ratio is 1:6
- What is the land value?
- What is the Land Ratio Percentage?





ALLOCATION – Finding Ratio

- ALLOCATION METHOD Separating a comparable sale into it's component parts.
- Ex. Sale is \$200,000
- land value is \$50,000
- What is the land to building ratio?
- What is the land ratio only?
- \$200,000 / \$50,000 = 4 total parts 1 + 3
- 1 part land 3 parts building
- 1:3 ratio
- 1 / 4 = .25 land ratio
- 3/4 = .75 bldg ratio





ALLOCATION – Finding Ratio

- ALLOCATION METHOD Separating a comparable sale into it's component parts.
- Ex. Sale is \$150,000
- land value is \$30,000
- What is the land to building ratio?





ALLOCATION – Finding Ratio

- ALLOCATION METHOD Separating a comparable sale into it's component parts.
- Ex. Sale is \$350,000
- land value is \$30,000
- What is the land to building ratio?
- What is the land ratio only?





Allocation – Finding Ratio

- Sale Price = 300,000
- Land Value = 75,000
- What is land to building ratio?
- What is land ratio only?





ABSTRACTION METHOD

- Employs the elements of the cost approach
- It involves subtracting out the cost of improvements
- What is leftover is land value
- Ex. Value of property from sale \$70,000
- Est. RCN of building \$60,000
 Accrued depreciation \$8,000
 Est. Value of Improvements \$52,000
- Indicated site or land value \$18,000





Abstraction

- Sale Price = 250,000
- RCN = 210,000
- Depreciation=9,000
- What is land value?





Abstraction

- Sale Price = 325,000
- RCN = 310,000
- Depreciation=4,000
- What is land value?





Abstraction

- Sale Price = 135,000
- RCN = 128,000
- Depreciation=7,000
- What is land value?





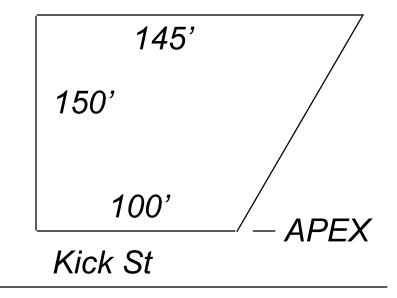
Formulas, Tables, Rules & Valuing Odd Shaped Lots

- 65-35 Rule =
- If odd shaped lot
- and apex (Point) of the triangle is on the front of the lot
- then, the value is multiplied by 35%
- If apex (point) of triangle is on the back of the lot
- then, value is multiplied by 65%





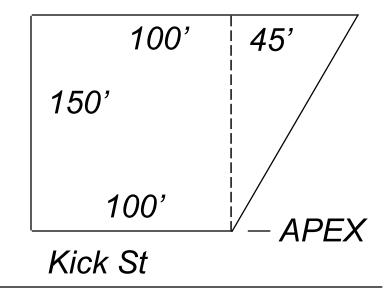
Value lot using the 65-35 rule Front foot price is \$50 standard depth 150'







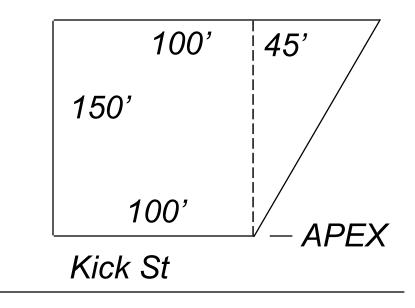
Value lot using the 65-35 rule Front foot price is \$50 standard depth 150'







Value lot using the 65-35 rule Front foot price is \$50 standard depth 150'



$$100 \times 50 = $5000$$

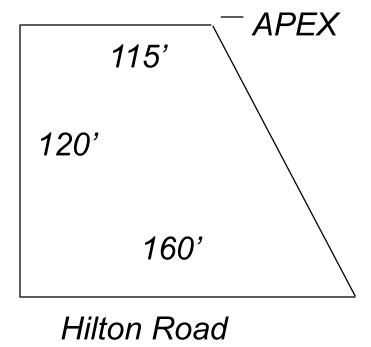
 $45 \times 50 \times .35 = 788
 $total lot val = 5788





Value lot using the 65-35 rule

Front Foot Price is \$75 standard depth 120'



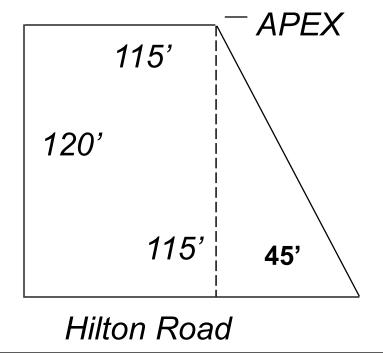
What is the Value of the subject lot?





Value lot using the 65-35 rule

Front Foot Price is \$75 standard depth 120'



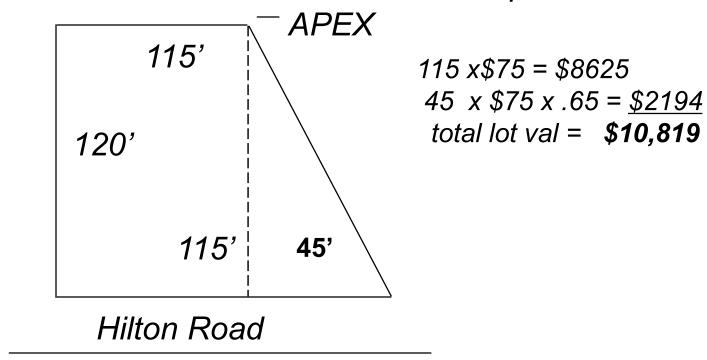
What is the value of the subject Lot?





Value lot using the 65-35 rule

Front Foot Price is \$75 standard depth 120'



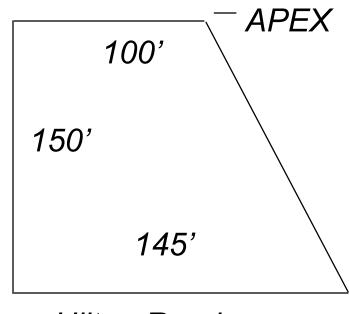
What is the value of the subject Lot?





Value lot using the 65-35 rule

Front Foot Price is \$50 standard depth 150'

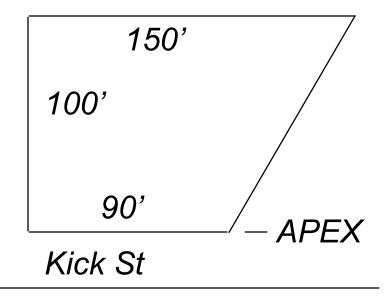


Hilton Road





Value lot using the 65-35 rule Front foot price is \$95 standard depth 100'

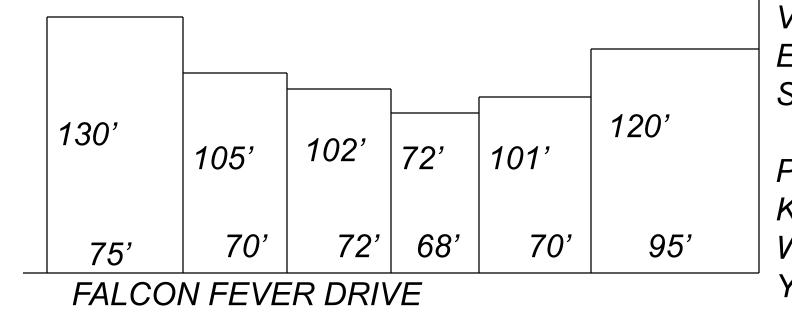






Standard Depths

What is the standard depth of lots in this area?

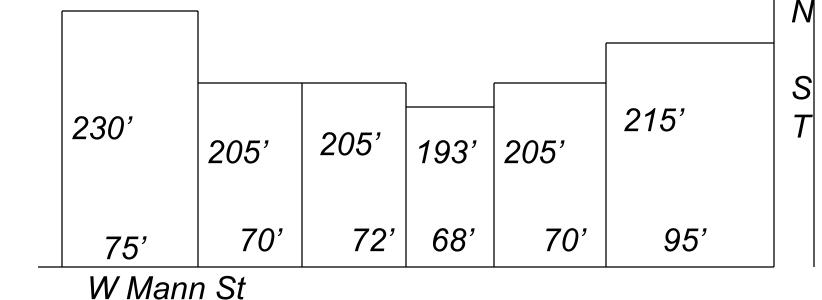






Standard Depths

What is the standard depth of lots in this area?

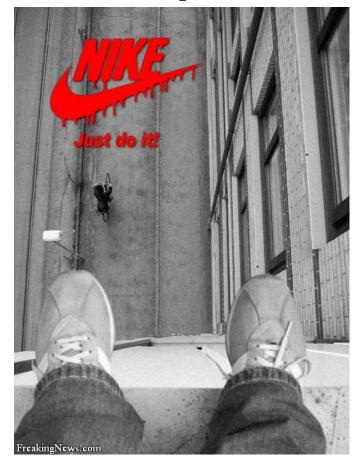






Market Influences For Depth

•Sales may show a specific percentage adjustment based on increments.





A GREAT STATE TO SERVE



Market Adjustment for Depth Front foot price is \$55 standard depth 100'

90'

95'

90'

Kick St

THERE IS A 10% DECREASE FOR EVERY 5 FEET BELOW standard DEPTH. WHAT IS THE DEPTH FACTOR and VALUE of LOT? Georgia®

4/26/2021



Georgia®

Georgia Department of Revenue

Market (Jump) Adjustment for Depth Front foot price is \$55 standard depth 100'

90'

95'

90'

Kick St

SD 100'-95' = 5'

5'/5' = 1 Jump

1 X 10%=10%

SDF 1.00-.10=.90 DF

 $90 \times \$55 = \4950

Depth factor x .90

 $Total\ lot\ val\ = \$4,455$



Georgia[®]

Georgia Department of Revenue

Market Adjustment for Depth Front foot price is \$75 standard depth 100'

90'

115'

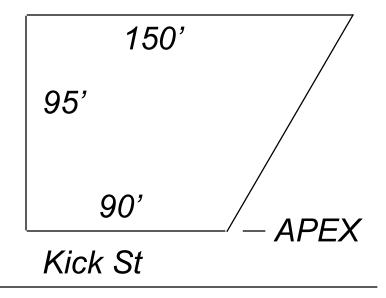
90'

Kick St

THERE IS A 3% Increase or Premium FOR EVERY 5 FEET Above standard DEPTH. WHAT IS THE DEPTH FACTOR and VALUE of LOT?



Value lot using the 65-35 rule Front foot price is \$55 standard depth 100'

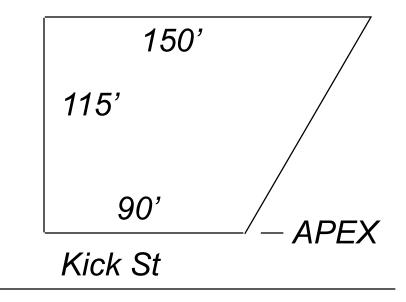


THERE IS A 10% DECREASE FOR EVERY 5 FEET BELOW standard DEPTH. WHAT IS the DEPTH FACTOR and VALUE of LOT?





Value lot using the 65-35 rule Front foot price is \$55 standard depth 100'

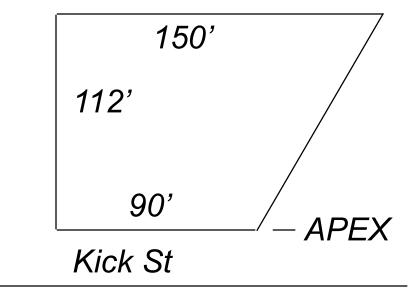


THERE IS A 3% PREMIUM INCREASE FOR EVERY 5 FEET ABOVE standard DEPTH. WHAT IS THE DEPTH FACTOR and VALUE of LOT? Georgia®

4/26/2021



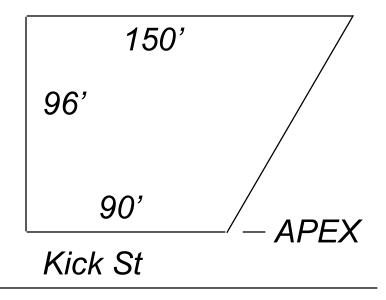
Value lot using the 65-35 rule Front foot price is \$55 standard depth 100'



THERE IS A 4% PREMIUM INCREASE FOR EVERY 4 FEET ABOVE standard DEPTH. WHAT IS THE DEPTH FACTOR and VALUE of LOT? Georgia®



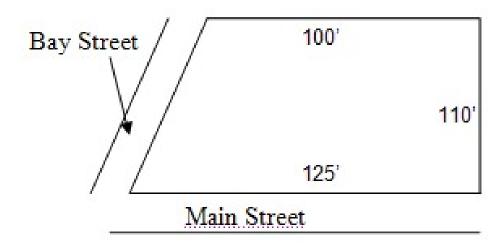
Value lot using the 65-35 rule Front foot price is \$55 standard depth 100'



THERE IS A 1% DECREASE FOR EVERY 2 FEET BELOW standard DEPTH. WHAT IS THE DEPTH FACTOR AND VALUE OF LOT?







Commercial lots in this area sell for \$160 per front foot. Standard lot depth is 100 feet. There is a 2% premium for each 5 feet of depth over 100 feet. The subject also receives a 5% premium for being a corner lot. Using the above information, what is the value of the subject property (rounded to the nearest \$100)?





CHAPTER 6 - Formulas, Tables, Rules & Valuing Odd Shaped Lots

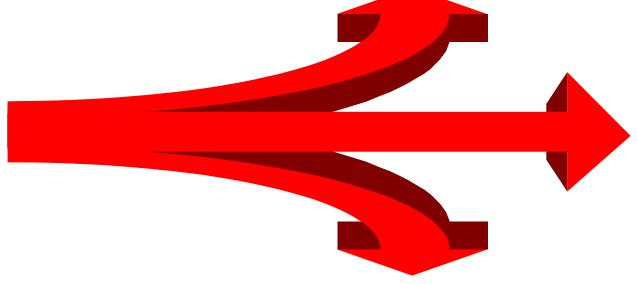
- 4-3-2-1 Rule =
- •
- 40% of the lot value is in the 1st quarter
- 30% is in 2nd quarter
- 20% is in the 3rd quarter
- 10% is in the 4th quarter.





Interpolation

 Interpolation is the process of finding intermediate terms or numbers in a sequence of terms or numbers.

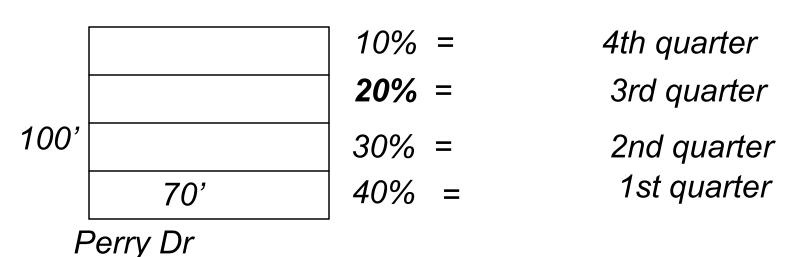






4-3-2-1 Rule Example

Front Foot is \$200 standard depth for lots in area is 100 feet (DF 1.00)



FF*\$FF*DF

 $70Ft \times $200 \times 1.00 = $14,000$

What is the Total Value of the lot?

GWhat is the Value of each guarter of the lot? GREAT STATE TO SERVE



4-3-2-1 Rule Example

Front Foot is \$200 standard depth for lots in area is 100 feet (DF 1.00)

100'	
	70'

Perry Dr

FF*\$FF*DF

Georgia[®]

 $70Ft \ X \$200 \ x \ 1.00 = \$14,000$

What is the Value of each quarter of the lot?

What is the Value and Percentage of value in the first 75 feet?

4/26/2021



4-3-2-1 Rule Example

Front Foot is \$200 standard depth for lots in area is 100 feet

100'

Perry Dr

 $70Ft \ X \$ 200 = \$ 14,000$

What is the Value of the 3rd quarter of the lot.

What is the Value and Percentage of value in the first 75 feet?

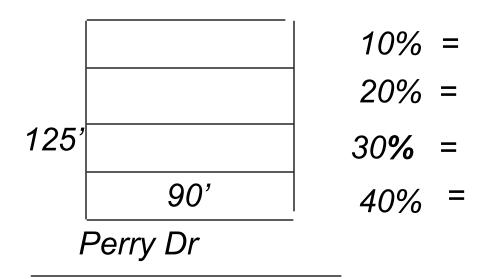
G.40=i.30+.20 =.90 * 14,000 = \$12,600

A GREAT STATE TO SERVE



4-3-2-1 Rule Example

Front Foot is \$175 standard depth is 125 feet for lots in area



What is the Value of Each Quarter of this lot. What is the value and percentage of value in the first 62.50 feet from the street?

Depth	Dfact100	Dfact150	Dfact200	Dfact250	Dfact300	
91	0.9640	0.7853	0.6460	0.5368	0.4640	
92	0.9680	0.7907	0.6520	0.5416	0.4680	
- 93	0.9720	0.7960	0.6580	0.5464	0.4720	
94	0.9760	0.8013	0.6640	0.5512	0.4760	
95	0.9800	0.8067	0.6700	0.5560	0.4800	
96	0.9840	0.8120	0.6760	0.5608	0.4840	
97	0.9880	0.8173	0.6820	0.5656	0.4880	
98	0.9920	0.8227	0.6880	0.5704	0.4920	
99	0.9960	0.8280	0.6940	0.5752	0.4960	
100	1.0000	0.8333	0.7000	0.5800	0.5000	
101	1.0036	0.8387	0.7040	0.5848	0.5040	
102	1.0072	0.8440	0.7080	0.5896	0.5080	
103	1.0108	0.8493	0.7120	0.5944	0.5120	
104	1.0144	0.8547	0.7160	0.5992	0.5160	
105	1.0180	0.8600	0.7200	0.6040	0.5200	
106	1.0216	0.8653	0.7240	0.6088	0.5240	
107	1.0252				0.5280	
108	1.0288	0.8760	^{26/202} 10.7320	0.6184	0.5320	RVE 257

	Depth	Dfact100	Dfact150	Dfact200	Dfact250	Dfact300
	142	1.1444	0.9787	0.8680	0.7544	0.6680
	143	1.1476	0.9813	0.8720	0.7576	0.6720
	144	1.1508	0.9840	0.8760	0.7608	0.6760
	145	1.1540	0.9867	0.8800	0.7640	0.6800
	146	1.1572	0.9893	0.8840	0.7672	0.6840
	147	1.1604	0.9920	0.8880	0.7704	0.6880
	148	1.1636	0.9947	0.8920	0.7736	0.6920
	149	1.1668	0.9973	0.8960	0.7768	0.6960
	150	1.1700	1.0000	0.9000	0.7800	0.7000
	151	1.1728	1.0024	0.9020	0.7832	0.7027
	152	1.1756	1.0048	0.9040	0.7864	0.7053
	153	1.1784	1.0072	0.9060	0.7896	0.7080
	154	1.1812	1.0096	0.9080	0.7928	0.7107
	155	1.1840	1.0120	0.9100	0.7960	0.7133
	156	1.1868	1.0144	0.9120	0.7992	0.7160
	157	1.1896	1.0168	0.9140	0.8024	0.7187
	158	1.1924	1.0192	0.9160	0.8056	0.7213
2	159	1.1952	1.0216	^{26/2021} 0.9180	0.8088	0.7240

Depth	Dfact100	Dfact150	Dfact200	Dfact250	Dfact300	
190	1.2760	1.0953	0.9800	0.9040	0.8067	
191	1.2784	1.0975	0.9820	0.9056	0.8093	
- 192	1.2808	1.0996	0.9840	0.9072	0.8120 💳	
193	1.2832	1.1017	0.9860	0.9088	0.8147	
194	1.2856	1.1039	0.9880	0.9104	0.8173	
195	1.2880	1.1060	0.9900	0.9120	0.8200	
196	1.2904	1.1081	0.9920	0.9136	0.8227	
197	1.2928	1.1103	0.9940	0.9152	0.8253	
198	1.2952	1.1124	0.9960	0.9168	0.8280	
199	1.2976	1.1145	0.9980	0.9184	0.8307	
200	1.3000	1.1167	1.0000	0.9200	0.8333	
201	1.3002	1.1188	1.0018	0.9216	0.8360	
202	1.3004	1.1209	1.0036	0.9232	0.8387	
203	1.3006	1.1231	1.0054	0.9248	0.8413	
204	1.3008	1.1252	1.0072	0.9264	0.8440	
205	1.3010	1.1273	1.0090	0.9280	0.8467	
206	1.3012	1.1295	1.0108	0.9296	0.8493	
(Ge 207	1.3014	1.1316	(26/2021).0126	0.9312	0.8520 erve	2

Depth	Dfact100	Dfact150	Dfact200	Dfact250	Dfact300	
239	1.3078	1.1961	1.0702	0.9824	0.9187	
240	1.3080	1.1980	1.0720	0.9840	0.9200	
– 241	1.3082	1.1999	1.0738	0.9856	0.9213	_
242	1.3084	1.2017	1.0756	0.9872	0.9227	
243	1.3086	1.2036	1.0774	0.9888	0.9240	
244	1.3088	1.2055	1.0792	0.9904	0.9253	
245	1.3090	1.2073	1.0810	0.9920	0.9267	
246	1.3092	1.2092	1.0828	0.9936	0.9280	
247	1.3094	1.2111	1.0846	0.9952	0.9293	
248	1.3096	1.2129	1.0864	0.9968	0.9307	
249	1.3098	1.2148	1.0882	0.9984	0.9320	
250	1.3100	1.2167	1.0900	1.0000	0.9333	
251	1.3102	1.2185	1.0916	1.0014	0.9347	
252	1.3104	1.2204	1.0932	1.0029	0.9360	
253	1.3106	1.2223	1.0948	1.0043	0.9373	
254	1.3108	1.2241	1.0964	1.0058	0.9387	
255	1.3110	1.2260	1.0980	1.0072	0.9400	
(G 256	1.3112	1.2279	/26/2021 0996	1.0086	0.9413	ERVE 260

	Depth	Dfact100	Dfact150	Dfact200	Dfact250	Dfact300
	289	1.3178	1.2824	1.1524	1.0562	0.9853
	290	1.3180	1.2840	1.1540	1.0576	0.9867
	291	1.3182	1.2856	1.1556	1.0590	0.9880
	292	1.3184	1.2872	1.1572	1.0605	0.9893
	293	1.3186	1.2888	1.1588	1.0619	0.9907
	294	1.3188	1.2904	1.1604	1.0634	0.9920
	295	1.3190	1.2920	1.1620	1.0648	0.9933
	296	1.3192	1.2936	1.1636	1.0662	0.9947
	297	1.3194	1.2952	1.1652	1.0677	0.9960
	298	1.3196	1.2968	1.1668	1.0691	0.9973
	299	1.3198	1.2984	1.1684	1.0706	0.9987
	300	1.3200	1.3000	1.1700	1.0720	1.0000
	301	1.3202	1.3002	1.1714	1.0734	1.0012
	302	1.3204	1.3004	1.1728	1.0749	1.0024
	303	1.3206	1.3006	1.1742	1.0763	1.0036
	304	1.3208	1.3008	1.1756	1.0778	1.0048
	305	1.3210	1.3010	1.1770	1.0792	1.0060
e	306	1.3212	1.3012	26/20211 1784	1.0806	1.0072

(Ge



Standard Depth 160' FF \$ = \$50

160'
150'
100'

Street



Standard Depth 160' FF \$ = \$50

160'	40'	.10	30'	30/40=.75x.10=.0750 +.2000 +.3000
	40'	.20	40'	+.4000 .9750 df
4	40'	.30	40'	\$50X100ff x .9750=\$4,875
	40'	.40	40' 10	150' 0'

Street

What is the Depth Factor for a 150' deep lot?
What is the Value of the subject lot if it is 100' feet wide? Serve



Standard Depth 100' FF \$ = \$90

100' 82'

Street



Standard Depth 200' FF \$ = \$50

200'

75'

120'

Street



Standard Depth 125' FF \$ = \$95

125' 80'

Street

What is the Depth Factor for an 80' deep lot?

Georgia What is the Value of the subject lot if it is 125 feet wide? Serve



Standard Depth 160' FF \$ = \$95

160'

115'

110'

Street



Standard Depth 100' FF \$ = \$50

100' 4

120'

112'

Street

L OF C FOOD

Georgia Department of Revenue Standard Depth 100' FF \$ = \$50

25' Ghost	.09	20'	
25'	.10	25'	
25'	.20	25'	
25'	.30	25'	
25'	.40	25' 112'	12

Street

What is the Depth Factor for a 120' deep lot?

Georgia What is the Value of the subject lot if it is 112 feet wide? Serve



Standard Depth 200' FF \$ = \$95

<u>200'</u> 4

205'

105'

Street



Case Study 4-3-2-1

Work problem on Page 213



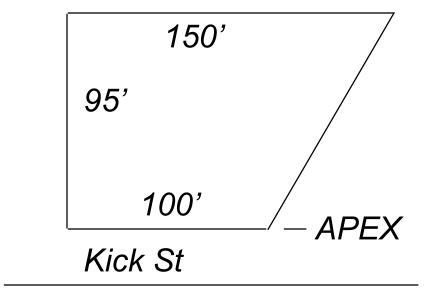


Solution to Case Study 4-3-2-1





Value lot using the 65-35 rule
Front foot price is \$65 standard depth 100'

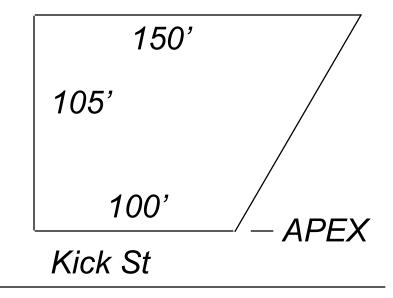


What is the Depth Factor for this Lot? What is the Value of the subject lot?





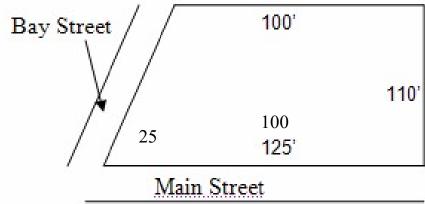
Value lot using the 65-35 rule Front foot price is \$85 standard depth 120'



What is the Depth Factor for this Lot? What is the Value of the subject lot?







Use interpolation (4-3-2-1 rule) for a standard depth of 100'. Front Foot Price is \$250 on Main street.

What is the value of the lot.





Corner Influence

- Corner Influence -
- CI=SPCL/SPIL
- CI=Sale price of corner lot divided by Sale price of Interior Lot

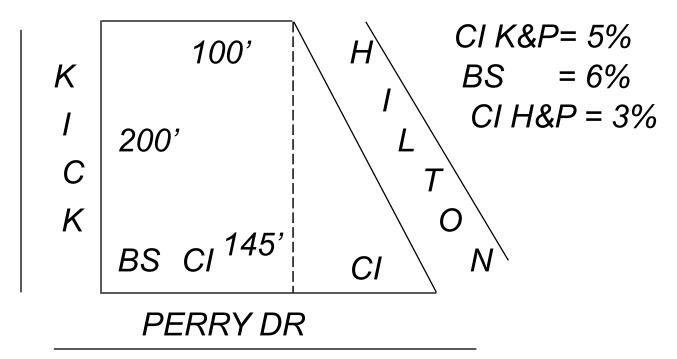
35,000 CL / 30,000 IL = 1.17

\$350 / \$300 = 1.17 \$/ FF CL divided by \$/ FF IL





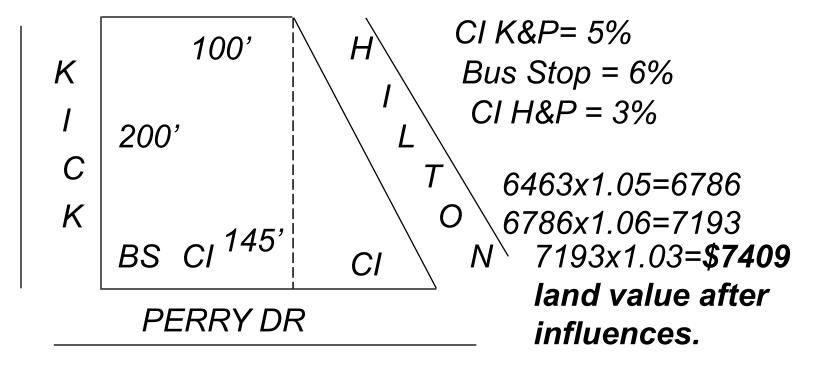
Value lot using the 65-35, Dfs, Infl. Front Foot Price is \$50 on Perry Dr standard depth 200'







Value lot using the 65-35, Dfs, Infl. Front Foot Price is \$50 on Perry Dr standard depth



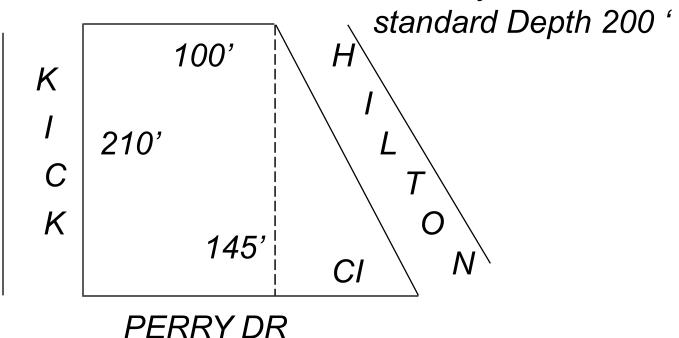
100X\$50=\$5,000

45X\$50=\$2,250X 65%=\$1462.50 (\$1463) (Georg\$5000+\$1463)=**\$6463**, value before influences



Value lot using the 65-35, Dfs, Infl.

Front Foot Price is \$50 on Perry dr



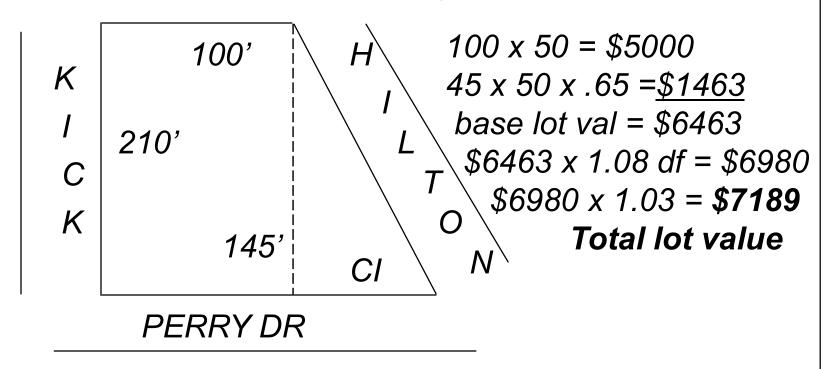
4% increase for every 5 feet over standard depth.

Corner Influence Hilton & Perry = 3%





Value lot using the 65-35, Dfs, Infl. Front Foot Price is \$50 on Perry dr standard Depth 200 '



4% increase for every 5 feet over standard.

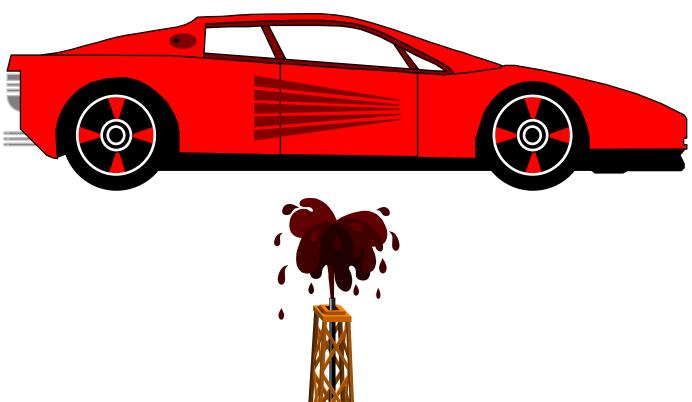
Corner Influence Hilton & Perry = 3%





Because all influences together are better than one by itself.

Why Compound Influences?

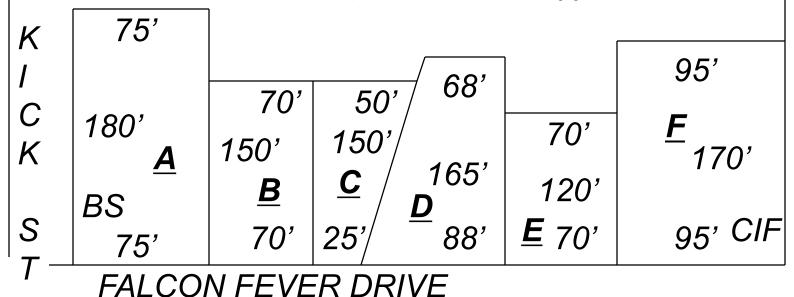






CALCULATE ALL LOTS AND SHOW ALL WORK

Standard Depth is 150'
Front Foot Price is \$90
BS = 10%
CIF ON BRAVES & FALCON = 5%







PLOTTAGE

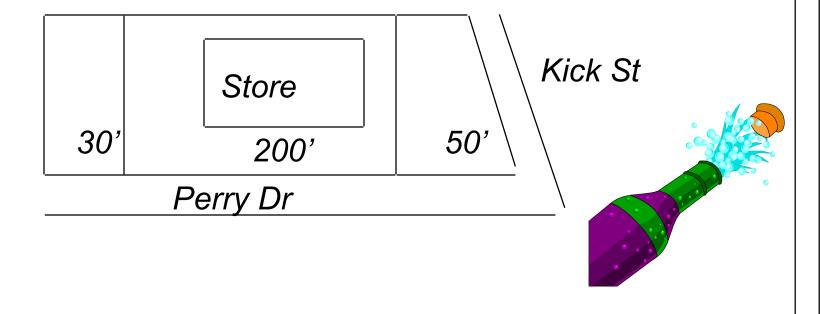
 PLOTTAGE is defined as the combining of property for greater utility and greater value.





PLOTTAGE

 PLOTTAGE is defined as the combining of property for greater utility and greater value.







ASSEMBLAGE

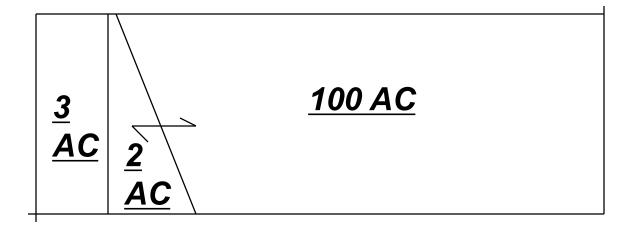
• **ASSEMBLAGE** - The merging of adjacent properties into one of common ownership or use.





ASSEMBLAGE

 ASSEMBLAGE - The merging of adjacent properties into one of common ownership or use.







NEGATIVE PLOTTAGE

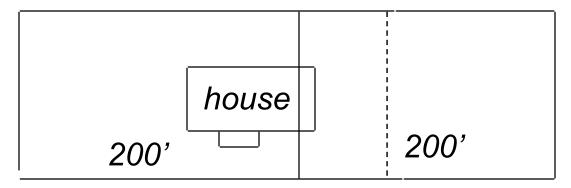
 NEGATIVE PLOTTAGE - the combining of property causing a site to have lesser utility.





NEGATIVE PLOTTAGE

 NEGATIVE PLOTTAGE - the combining of property causing a new site to have lesser utility.







- While analyzing a sales ratio study in an improved subdivision, the appraiser finds assessment/sales ratios to be at an unacceptable level.
- How should this be corrected? Which would not be acceptable below?
- Verify property record characteristics are correct?
- Verify lot values and method was updated?
- Ratio of Vacant Land
- Structure cost tables how long since updated?
- Stratify the neighborhoods and see if this has some influence. Ratio by neighborhood. Is neighborhood factor correct or needed.
- Check condition and depreciation tables or maintenance or lack of to the structures.
- Style or occupancy of house. Run ratio on style houses.
- Check sales reason codes and run ratios based on true arm's length vs Bank or foreclosure resales. May use allocation of ratio of each to derive a weighted average neighborhood factor.
- Change quality grade based on mathematical calculation of being low.....add fake area to sq footage....override value to desired results.....override dep to account for difference in fmv......add parts to the house such as sprinkler system, etc..
- Only change grade if rampant sales chasing had been performed in the past or an error of manifest....





- •Attention Instructors!
- Please present the following 5 slides on the last day of class.
- Emphasize that students should wait 2 weeks before contacting the coordinators for grades or access to portal.
- Doing otherwise only slows the process for everyone.





Notification of grades

- Please allow 14 days from the last day of the class to receive your grades.
- If after 14 days you have not received your grade please contact:
- •Kim Oliver 404-724-7044 or kim.oliver@dor.ga.gov
- •Vera Brown 404-724-7048 or vera.brown@dor.ga.gov





Notification of grades

- New students will receive two email from Georgia Department of Revenue Portal. The first provides access to the GCP portal and the second provides a password to the portal. Remember to check your junk or trash folder.
- Please do not call and ask for portal access.
 You will gain access through the email you receive.





Notification of grades

- Students who have activated their accounts will receive notification by email that grades are posted.
- If you do not want access to the portal, do not put your email address on the credit form.





GREAB Continuing Education Credit

- If applicable, please enter your GREAB Appraiser/Salesperson # on your registration form. Or,
- If you don't have your Appraiser/Salesperson # please contact Kim Oliver within 14 days of the end of this class.
- 404-724-7044 or kim.oliver@dor.ga.gov





GREAB Continuing Education Credit

- Please allow 14 days from the last day of class to have your Continuing Education Hours posted on the GREAB Website.
- If you have requested GREAB credit and it has not been posted, please contact Kim Oliver.

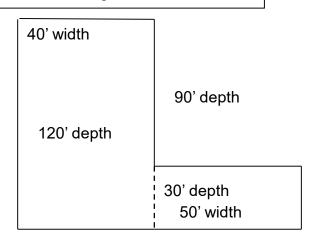
•404-724-7044 or kim.oliver@dor.ga.gov





Valuing Odd Shaped Lots - 100' Standard

Street Frontage \$50 front foot



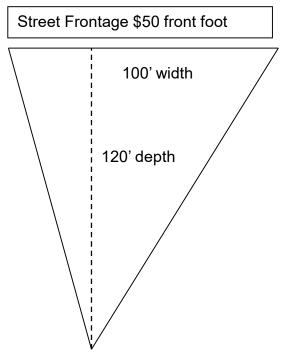
Lot 5

 $15 / 25 = .60 \times .10 = .06 + .20 + .30 + .40 = .960$ Depth Factor @ 90' $20 / 25 = .80 \times .09 = .072 + .10 + .20 + .30 + .40 = 1.072$ Total Depth Factor 1.072 - .960 = .1120 Depth Factor for Rear Lot $40' \times $50 = $2000 \times 1.072 = 2144 $50' \times $50 = $2500 \times .1120 = 280





Valuing Odd Shaped Lots – 100' Standard



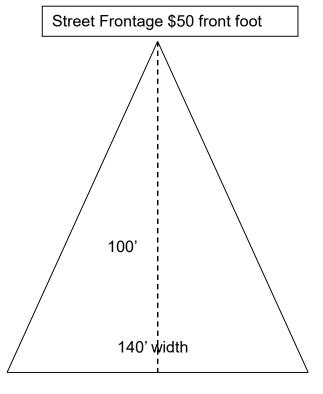
Lot 6

 $20 / 25 = .80 \times .09 = .072 + .10 + .20 + .30 + .40 = 1.072$ Total Depth Factor 65% of 100' = 65' x \$50 = \$3250 x 1.072 = \$3484





Valuing Odd Shaped Lots – 100' Standard



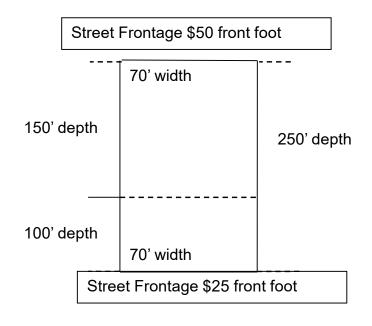
Lot 7

35% of 140' = 49' \times \$50 = \$2450 \times 1.00 = \$2450.





Valuing Odd Shaped Lots – 100' Standard



Lot 9

.08 + .09 + .10 + .20 + .30 + .40 = 1.17 Depth Factor @ 150'

 $70' \times $50 = $3500 \times 1.17 = 4095

70' \times \$25 = \$1750 \times 1.00 = \$1750

\$4095 + \$1750 = \$5845

